Naval Facilities Engineering Command, Southwest
Contracts Department
1220 Pacific Highway, Building 127, Room 112
San Diego, California 92132-5190

CONTRACT NO. N68711-04-D-1104
CTO NO. 0010

FINAL
GROUNDWATER MONITORING REPORT
UST SITE 14137

August 21, 2006

MARINE CORPS BASE
CAMP PENDLETON, CALIFORNIA

DCN: SES-TECH-06-0156

Prepared by:

SES-TECH

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ABBREVIATIONS AND ACRONYMS

amsl	above mean sea level
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CTO	Contract Task Order
DEH	Department of Environmental Health
DO	dissolved oxygen
DOT	Department of Transportation
EPA	U.S. Environmental Protection Agency
ft/ft	feet per foot
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
MCB	Marine Corps Base
mg/L	milligrams per liter
µg/L	micrograms per liter
MTBE	methyl tert-butyl ether
ORP	oxidation/reduction potential
PAH	polynuclear aromatic hydrocarbon
QC	quality control
RL	reporting limit
RPD	relative percent difference
RWQCB	Regional Water Quality Control Board
SAP	Sampling and Analysis Plan
TPH-d	total petroleum hydrocarbons quantified as diesel
UST	Underground Storage Tank
VOC	volatile organic compound
Water Board	California Regional Water Quality Control Board

1.0 INTRODUCTION

This Groundwater Monitoring Report, prepared by SES-TECH, a joint venture between Sealaska Environmental Services LLC and Tetra Tech EC, Inc., presents the results of groundwater sampling completed in June 2006 at Underground Storage Tank (UST) Site 14137 at the Marine Corps Base (MCB) Camp Pendleton, California (Figures 1-1 and 1-2). This groundwater sampling event is the first of four quarterly sampling events proposed to be completed as part of the monitored natural attenuation remedial alternative requested for the site in the Corrective Action Plan (SES-TECH, 2006). The groundwater sampling activities conducted at the site, as well as the associated reporting activities, were performed under Contract Task Order No. 0010 for the Naval Facilities Engineering Command, Southwest Indefinite Delivery/Indefinite Quantity Contract No. N68711-04-D-1104.

1.1 SCOPE OF WORK

Groundwater monitoring at UST Site 14137 included measuring water levels and collecting and analyzing groundwater samples. During the June 2006 sampling event, all four wells at the site were sampled. The samples were analyzed for total petroleum hydrocarbons quantified as diesel (TPH-d); volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tert-butyl ether (MTBE), and other fuel oxygenates; and polynuclear aromatic hydrocarbon (PAHs). As well as analyzing for contaminants of concern, samples were also analyzed for parameters to evaluate natural attenuation. Laboratory analysis for nitrate and sulfate, along with field measurements of dissolved oxygen (DO) and the oxidation/reduction potential (ORP) were performed. Moreover, iron (II) analyses were performed in the field using a kit specifically designed for this purpose.

1.2 SITE IDENTIFICATION

Site identification data:

Site Address:	Building 14137, 14 Area, MCB Camp Pendleton, CA 92055
Facility Name:	Combat Skills Training School
County of San Diego Department of Environmental Health (DEH) Case No.:	H05939-026
California Regional Water Quality Control Board (Water Board, formerly RWQCB) Case No.:	9UT640
Responsible Party:	United States Marine Corps
Contact Person:	Mr. Chet Storrs, Remediation Branch Manager Assistant Chief of Staff, Environmental Security Building 22165, Box 555008 MCB Camp Pendleton, California 92055-5008 (760) 725-9774
Remedial Project Manager:	Mr. Bipin Patel NAVFAC SW 1220 Pacific Highway San Diego, CA 92132-5190 (619) 532-4814

2.0 GROUNDWATER SAMPLING

The following sections summarize the June 2006 quarterly sampling event, the first of four consecutive events to be completed at UST Site 14137.

2.1 WATER LEVEL MEASUREMENTS

As part of the groundwater sampling event, the depth to water and the total depth of each well were measured from the top of the well casing and recorded on a well sampling log (Appendix A). Water levels in the three wells installed in 1998 (MW1, MW2, and MW3) were all above their respective screened intervals. Table 2-1 provides a summary of the groundwater elevation data.

A groundwater elevation contour map was prepared based on the most recently recorded water levels (Figure 2-1).

2.2 SAMPLING METHODOLOGY

On June 27, 2006, all monitoring wells (MW1, MW2, MW3, MW5, MW6, and MW7) were sampled using low-flow sampling methodology. Before sampling, a bladder pump was slowly lowered into each well and positioned approximately 2 feet below the surface of the groundwater table. In addition, a water-level indicator was placed at the water surface to monitor water-level drawdown during purging. While purging at the lowest operational setting of the pump, which was approximately 100 milliliters per minute, the water level surface began to slowly drop and exceeded the minimum drawdown requirement of 0.33 feet at all wells except MW6.

Because a stabilized water level could not be achieved, even at very low pumping rates, a passive or minimum purge sampling method was performed following the methodology presented in a U.S. Environmental Protection Agency (EPA) Groundwater Issue paper titled *Low Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (Puls and Barcelona, 1996). The passive/minimal purge approach requires the removal of a minimum of three volumes of the sampling system from each well. The liquid volume of the sampling system consists of the volume of the pump's bladder, discharge tubing, and flow through cell attached to the water quality meter. After purging the required volume at the lowest flow rate achievable for each well, a groundwater sample was collected.

To monitor groundwater conditions during purging, water-quality parameters were measured as follows: temperature, pH, electrical conductivity, turbidity, dissolved oxygen, and oxygen/reduction potential. These measurements were recorded on the well sampling logs provided in Appendix A. After purging the required volume at the lowest flow rate achievable for each well, a groundwater sample was collected. Groundwater samples were collected through new disposable polyethylene discharge tubing connected to the bladder pump. Each sample was

collected in the appropriate containers, labeled, and placed in a cooler with ice immediately after sample collection for delivery to the analytical laboratory.

All non-disposable down-hole equipment, such as the bladder pump and water-level indicator, were decontaminated before sampling each well.

2.3 SAMPLE ANALYSES

Groundwater samples were delivered by courier to EMAX Laboratories in Torrance, California, for analysis of TPH-d using EPA Method 8015B, VOCs using EPA Method 8260B, and PAHs using EPA Method 8270C. To continue evaluating the site for potential natural attenuation of groundwater, samples were analyzed for nitrate and sulfate by EPA Method 300.0. On-site analysis for ferrous iron [iron (II)] was completed using a Hach IR-18C field kit and documented for each well on the well sampling forms (Appendix A).

2.4 WASTE MANAGEMENT

All equipment decontamination water and groundwater generated from well purging were temporarily contained in Department of Transportation (DOT)-approved drums and stored on site. The drums were closed, marked, labeled, and located to minimize traffic hazards and discourage tampering. The wastewater drums were transported off site for disposal at a waste-permitted facility. The handling, management, transportation, and disposal of wastewater were conducted in accordance with state and federal laws and regulations. No wastes were stored at the site for more than 60 days. A copy of the waste manifest is provided in Appendix B.

3.0 GROUNDWATER MONITORING RESULTS

Groundwater flow and analytical results from the June 2006 sampling event are discussed in the following subsections.

3.1 GROUNDWATER FLOW DIRECTION

Groundwater elevations measured during the June 2006 event are presented in Figure 2-1.

As shown on Figure 2-1, groundwater elevations at the site ranged from 277.43 feet above mean sea level (amsl) at MW4 and MW6 to 273.93 feet amsl at MW5. Based on water levels measured in June 2006, groundwater is flowing toward the south/southeast with an approximate gradient of 0.032 feet per foot (ft/ft).

3.2 ANALYTICAL RESULTS

A total of six groundwater samples (plus a field duplicate, a trip blank, and an equipment rinsate sample) were collected during the June 2006 event and sent to EMAX Laboratories for analysis. The analytical results were successfully uploaded to the Water Board Geotracker database (Confirmation No. 5100168466). A summary of groundwater sampling results is presented in Table 3-1 and summarized on Figure 2-1. Copies of the analytical laboratory reports and chain-of-custody forms are provided in Appendix C.

TPH-d was detected in wells MW2 and MW7 only, at concentrations of 2.4 and 0.15 milligrams per liter (mg/L), respectively.

Samples from wells MW2 and MW7 also indicated the presence of methyl tert-butyl ether at concentrations comparable to those detected during the March 2006 sampling event (9.9 µg/L and 0.48 µg/L, respectively). No other VOCs were detected in any of the wells.

PAHs were not detected in any of the monitoring wells.

3.3 NATURAL ATTENUATION PARAMETERS ANALYTICAL RESULTS

As discussed in Section 2.3, in addition to analyzing for contaminants of concern, samples from all wells were also analyzed for parameters to be used for evaluation of natural attenuation of groundwater. Laboratory analyses for nitrate and sulfate, along with field measurements of DO and ORP, were performed. Furthermore, iron (II) analyses were performed in the field using a kit designed specifically for this purpose. These analytical results and field measurements are summarized in Table 3-2. Purging and sampling data sheets with the recorded ORP and DO readings and iron (II) results for each well are provided in Appendix A.

4.0 QUALITY ASSURANCE AND QUALITY CONTROL

This section summarizes the quality assurance and quality control (QC) results for the June 2006 groundwater monitoring event.

All groundwater samples were collected and preserved in accordance with the *San Diego County DEH Site Assessment and Mitigation Manual 2004* (DEH, 2004), and were delivered to the analytical laboratory within 24 hours of sample collection by a laboratory courier and analyzed within the method-specified analytical holding times. EMAX Laboratories, Inc., a state of California-certified and Naval Facility Engineering Service Center evaluated laboratory, performed sample analyses.

One field duplicate sample was collected from monitoring well MW2 (identified as 10-14137-035). The analytical results for the duplicate sample correlated well with the primary sample results (identified as 10-14137-034). The relative percent differences (RPDs) for detected target analytes such as TPH-d and MTBE were zero percent, indicating an excellent agreement between the field sample and its duplicate.

To assess potential cross-contamination of VOCs during sample transport, one trip blank sample (identified as 10-14137-028) was sent along with groundwater samples to the laboratory and analyzed for VOCs. In addition, one equipment rinsate sample was collected (identified as 10-14137-036) to assess potential cross-contamination of VOCs, TPH-d, and PAHs from equipment used for sampling. Detectable levels of target analytes were not reported above half the project reporting limits (RLs) in either the trip blank or the equipment rinsate sample indicating that the sample transport and decontamination procedure yielded no cross-contamination during this sampling event.

In accordance with analytical method specifications, method blanks, surrogate spikes, laboratory control samples (LCSs), and laboratory control sample duplicates (LCSDs) were analyzed to assess method accuracy and precision.

No detectable levels of target analytes were found in the method blanks during this event. Percent recoveries in LCS, LCSD, and surrogates and RPDs between the spiked duplicates were well within the project-specified QC acceptance limits. One of the LCSs for acenaphthene and acenaphthylene were recovered slightly lower than the project QC acceptance limits. The acceptable second LCS recoveries indicated method control.

In accordance with the Sampling and Analysis Plan (SAP) (SES-TECH, 2005), Validata Chemical Services, Inc., a third-party validation company, located in Duluth, Georgia, performed EPA Level III/IV validation of analytical data. For this sampling event, 1 sample was validated according to the EPA Level IV protocol, and 8 samples (including field QC samples) were

validated according to the EPA Level III protocol. The validation reported that all of the applicable criteria were met for all of the samples.

5.0 SUMMARY

Based on water-level measurements recorded for the June 2006 event, groundwater beneath the site flows to the south with a gradient of approximately 0.032 ft/ft. Groundwater elevations at the site ranged from 277.43 feet amsl at MW1 and MW6 to 273.93 feet amsl at MW5.

The analytical results for the June 2006 groundwater sampling event were successfully uploaded to the Water Board Geotracker database (Confirmation No. 5100168466). During the June 2006 event, TPH-d (at 2.4 and 0.15 mg/L) and MTBE (at 9.9 and 0.48 µg/L) were detected in two of the six wells.

This sampling event was the first of four consecutive quarterly events to be completed to support site closure. The second quarterly event is currently scheduled for September 2006. SES-TECH will continue to execute this sampling scheme and make a recommendation concerning further corrective action, if appropriate, upon its completion.

6.0 REFERENCES

Puls R. and M.J. Barcelona. 1996. *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures.* April.

SES-TECH. 2005. *Final Sampling and Analysis Plan UST Site 14121,MCB Camp Pendleton (Field Sampling Plan and Quality Assurance Project Plan, Revision 1.* April 29.

SES-TECH. 2006. *Final Corrective Action Plan for UST Site 14137, MCB Camp Pendleton.* June

San Diego County Department of Environmental Health, Land and Water Quality Division (DEH). 2004. *San Diego County Site Assessment and Mitigation Manual 2004*.

TABLES

TABLE 2-1

SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS, UST SITE 14137, MCB CAMP PENDLETON, CA

Monitoring Well ID	Well Screen Interval (feet btoc)	Reference Point (toc) Elevation (feet amsl)	Date Measured	Depth to Water (feet btoc)	Groundwater Elevation (feet amsl)
MW1	10 – 20	284.56	12/1/1998	6.19	278.37
			3/14/2006	6.84	277.72
			6/19/2006	7.13	277.43
MW2	10 – 20	284.02	12/1/1998	6.74	277.28
			3/14/2006	7.29	276.73
			6/19/2006	7.60	276.42
MW3	10 – 20	282.76	12/1/1998	7.38	275.38
			3/14/2006	7.66	275.10
			6/19/2006	7.72	275.04
MW5	5 – 15	282.04	3/14/2006	7.70	274.34
			6/19/2006	8.11	273.93
MW6	5 – 15	284.89	12/1/1998	6.58	278.31
			3/14/2006	6.74	278.15
			6/19/2006	7.46	277.43
MW7	5 – 15	283.13	3/14/2006	7.82	275.31
			6/19/2006	8.13	275.00

Notes:
amsl - above mean sea level
btoc - below top of casing
MCB - Marine Corps Base
toc - top of casing
UST - Underground Storage Tank

TABLE 3-1

SUMMARY OF HISTORICAL GROUNDWATER SAMPLING RESULTS, UST SITE 14137, MCB CAMP PENDLETON, CA

Well ID	Date Sampled	Sample ID	TPH-d (mg/L)	VOCs (µg/L)							PAHs (µg/L)
				Benzene	Toluene	Ethylbenzene	Xylenes (total)	MTBE	Bromodichloromethane	Dibromodichloromethane	
MW1	03/14/06	0004-120	--	--	--	--	--	--	--	--	--
	06/27/06	10-14137-030	--	--	--	--	--	--	--	--	--
MW2	03/14/06	0004-121	2.2	--	--	--	--	9.5	--	--	--
	06/27/06	10-14137-034	2.4	--	--	--	--	9.9	--	--	--
		10-14137-035 (Dup)	2.4	--	--	--	--	9.9	--	--	--
MW3	03/14/06	0004-123	--	--	--	--	--	--	--	--	--
	06/27/06	10-14137-032	--	--	--	--	--	--	--	--	--
MW5	03/14/06	0004-122	--	--	--	--	--	--	--	--	--
	06/27/06	10-14137-031	--	--	--	--	--	--	--	--	--
MW6	03/14/06	0004-119	--	--	--	--	--	--	--	--	--
	06/27/06	10-14137-029	--	--	--	--	--	--	--	--	--
MW7	03/14/06	0004-124	0.25	--	--	--	--	0.41 J	0.3 J	0.32 J	--
		0004-125 (Dup)	0.26	--	--	--	--	0.44 J	0.31 J	0.33 J	--
	06/27/06	10-14137-033	0.15	--	--	--	--	0.48J	--	--	--

Notes:

-- - not detected above project reporting limits
µg/L - micrograms per liter
Dup - duplicate sample
J - estimated value
MCB - Marine Corps Base
mg/L - milligrams per liter
MTBE - methyl tert-butyl ether
PAH - polynuclear aromatic hydrocarbon
TPH-d - total petroleum hydrocarbons quantified as diesel
UST - Underground Storage Tank
VOC - volatile organic compound

TABLE 3-2

SUMMARY OF GROUNDWATER RESULTS FOR EVALUATION OF NATURAL ATTENUATION UST SITE 14137 MCB CAMP PENDLETON, CA

Monitoring Well ID	Date Sampled	Sample ID	Nitrate(1) (mg/L)	Sulfate(1) (mg/L)	Iron (II)(2) (mg/L)	Dissolved Oxygen(3) (mg/L)	ORP(3) (mV)
MW1	26-Jun-06	10-14137-030	--	78.8	0.0	0.09	-46
MW2	26-Jun-06	10-14137-034	--	90.7	0.2	0.38	-103
	26-Jun-06	10-14137-035 (Dup)	--	90.8	0.0	0.63	-88
MW3	26-Jun-06	10-14137-032	--	161	0.0	1.48	-17
MW5	26-Jun-06	10-14137-031	--	156	0.0	1.50	42
MW6	26-Jun-06	10-14137-029	--	173	0.0	0.99	25
MW7	26-Jun-06	10-14137-033	--	133	0.0	4.48	213
		Reporting Limits	0.1	0.5	(4)	(4)	(4)

Notes:

(1) - Analyzed by EPA Method 300.0

(2) - Ferrous iron by Hach IR-18C field kit

(3) - Parameters measured using field instruments

(4) - Not applicable for field measurements

-- - not detected above laboratory reporting limit

Dup - duplicate sample

MCB - Marine Corps Base

mg/L - milligrams per liter

mV - millivolts

ORP - oxidation/reduction potential

UST - Underground Storage Tank

FIGURES

DRAWN BY: MD	CHECKED BY: JS	APPROVED BY: MC	DCN: SES-TECH-06-0156	DRAWING NO: 06015611.DWG
DATE: 08/30/06	REV: REVISION 0		CTO: #0010	

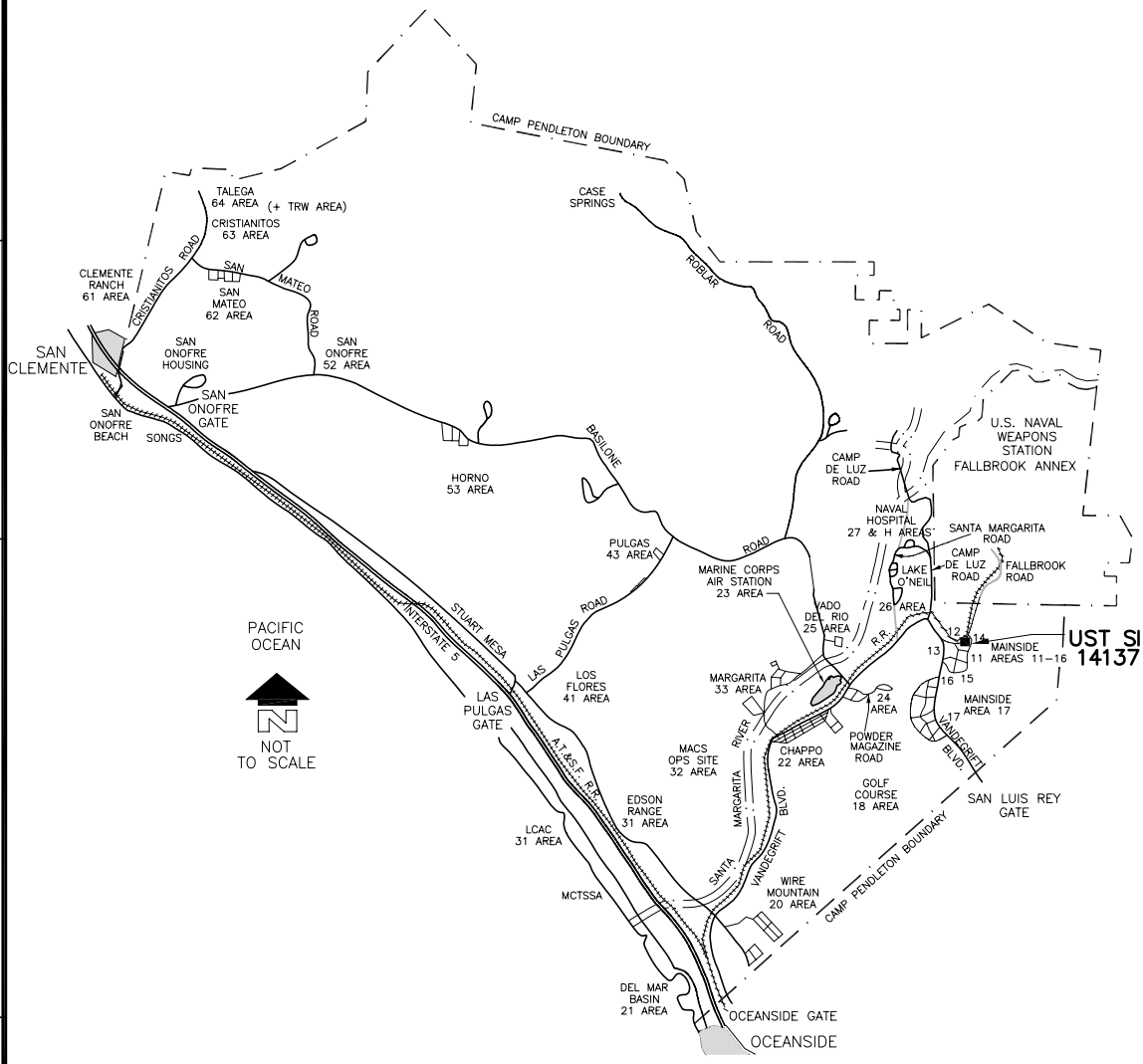

Figure 1-1
SITE LOCATION MAP

MCB CAMP PENDLETON

SES-TECH

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DATE: 08/30/06	REV: REVISION 0		CTO: #0010	06015612.DWG

Figure 1-2
SITE VICINITY MAP
UST SITE 14137
MCB CAMP PENDLETON
SES-TECH

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PLOT/UPDATE: AUG 09 2006 12:49:49

DRAWING NO: 06015621.DWG

DCN: SES-TECH-06-0156

CTO: #0010

APPROVED BY: MC

CHECKED BY: JS

REV: REVISION 0

DRAWN BY: MD

DATE: 08/30/06

MW14137-1	
TPH-d (mg/L)	ND
VOCs (µg/L)	ND
MTBE	ND
PAHs (mg/L)	ND

MW14137-6	
TPH-d (mg/L)	ND
VOCs (µg/L)	ND
MTBE	ND
PAHs (mg/L)	ND

MW14137-3	
TPH-d (mg/L)	ND
VOCs (µg/L)	ND
MTBE	ND
PAHs (mg/L)	ND

MW14137-2	
TPH-d (mg/L)	2.4
VOCs (µg/L)	ND
MTBE	9.9
PAHs (mg/L)	ND

MW14137-5	
TPH-d (mg/L)	ND
VOCs (µg/L)	ND
MTBE	ND
PAHs (mg/L)	ND

MW14137-7	
TPH-d (mg/L)	0.15
VOCs (µg/L)	ND(ND)
MTBE	0.48J
PAHs (mg/L)	ND

MW14137-1
277.43

MW14137-6
277.43

MW14137-2
276.42

MW14137-3
275.04

MW14137-5
273.93

MW14137-7
275.00

AREA OF SOIL EXCAVATION

FORMER UST

278.0

277.0

276.0

275.0

1413

10 5 0 10 20
SCALE IN FEET

LEGEND

MW14137-1 — GROUNDWATER MONITORING WELL

289.62 — GROUNDWATER ELEVATION

277.0 — GROUNDWATER TABLE CONTOUR WITH ARROWS INDICATING GROUNDWATER FLOW DIRECTION

ANALYTE
TPH-d
MTBE
B
T
E
X

GROUNDWATER SAMPLE ANALYTICAL RESULTS (IN MICROGRAMS PER LITER [µg/L]) UNLESS OTHERWISE NOTED

ABBREVIATIONS:

TPH-d	TOTAL PETROLEUM HYDROCARBONS QUANTIFIED AS DIESEL
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
J	ESTIMATED VALUE, REPORTED BETWEEN PRACTICAL QUANTITATION LIMIT AND METHOD DETECTION LIMIT
ND	NOT DETECTED
MTBE	METHYL TERT-BUTYL ETHER
PAH	POLYNUCLEAR AROMATIC HYDROCARBONS
VOCs	VOLATILE ORGANIC COMPOUNDS
(0.26)	RESULTS OF DUPLICATE SAMPLE
SES-TECH	SEALASKA ENVIRONMENTAL LLC AND AND TETRA TECH FW, INC.
mg/L	MILLIGRAMS PER LITER
µg/L	MICROGRAMS PER LITER

Figure 2-1
GROUNDWATER GRADIENT AND CONTAMINANT CONCENTRATION MAP (JUNE 2006)
UST SITE 14137

UST SITE 14137, MCB CAMP PENDLETON

SES-TECH

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PLOT/UPDATE: AUG 15 2006 13:07:56

APPENDIX A

WELL SAMPLING LOGS

SES-TECH

FIELD WATER LEVEL MEASUREMENTS

Date: 6/19/06 Project Name: UST Site 14137

Personnel: W. Bryant, J. Sager, J. Bartlett Project OFS: 293

Meaurement Device: Solinst

Weather: Hot, Sunny Comments

Well ID	Depth to Water from Measuring Point (feet)	Depth to Sediment from Measuring Point (feet)	Comments
MW3	7.72	23.30	
MW5	8.11	15.00	
MW6	7.46	14.18	
MW1	7.13	24.85	
MW7	8.13	14.91	
MW2	7.60	24.68	

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LOW-FLOW PURGING AND SAMPLING DATA SHEET

Project Name: Camp Pendleton / 14137 Well Number: MW1
Project Number: 2973.0100 Equipment: Horiba U-22
Date: 6/7/06 Sample ID: 10-14137-030 Time: 1015
Site Engineer(s): WB, JB Contractor: None

Reference: Top of Casing	Before	After
Depth to Water (ft)	7.53	8.03
Depth of Well (ft)	24.85	
Depth to Top of Screen (ft)	5	
Screen Length (ft)	20	
Pump Depth (ft)	9.5	
Pump Rate	160 mL/min	
Sample Pump Rate	160 mL/min	
System Volume (mL)	493	

Total Volume Purged (mL): 2400

493 = (9.5 x 2.4) + 470

System Volume (mL) = (2.4*H)+470
where
2.4mL/ft = tubing volume per foot (1/8" I.D.)
H = length of tubing in feet
470 mL = Bladder volume + Flowthru cell volume

Time	pH	Conductivity (umhos)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)	Cum. Volume (mL)	Comments
0953									pump on
0956	7.10	957	1.95	21.14	-26	16.7	7.68	480	clear, mod
0959	6.96	989	0.33	20.72	-34	30.7	7.71	960	"
1002	6.95	1080	0.26	20.58	-40	28.8	7.88	1440	"
1005	6.97	1160	0.19	20.64	-48	37.7	7.92	1920	"
1008	6.98	1240	0.09	20.66	-46	35.2	8.03	2400	"
1012									Stable
1015									collect samp
Stability:	± 0.2 units	± 5 %	± 0.2 mg/L	± 3 %	± 20 mV	± 10 %			

Hach Fe^{2+} 0.0

Samples were collected directly from pump unless otherwise noted.

SES-TECH

LOW-FLOW PURGING AND SAMPLING DATA SHEET

Project Name: Camp Pendleton / 14137
Project Number: 2973.0100
Date: 6/27/06
Site Engineer(s): WB, JB

Well Number: MW2
Equipment: Horiba U-22
Sample ID: 10-14137-034 Time: 1419
Contractor: 10-14137-035 1424

Reference: Top of Casing	Before	After
Depth to Water (ft)	8.05	8.54
Depth of Well (ft)	24.85	
Depth to Top of Screen (ft)	5	
Screen Length (ft)	20	
Pump Depth (ft)	10	
Pump Rate	100 mL/min	
Sample Pump Rate	100 mL/min	
System Volume (mL)	494	

Total Volume Purged (mL): 1800

494 = (2.4x10) +470

System Volume (mL) = (2.4*H)+470
where
2.4mL/ft = tubing volume per foot (1/8" I.D.)
H = length of tubing in feet
470 mL = Bladder volume + Flowthru cell volume

Time	pH	Conductivity (umhos)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)	Cum. Volume (mL)	Comments
1355									pump on
1358	7.06	1830	1.06	21.63	-93	9.7	8.21	300	clear, slight odor
1401	7.07	1830	0.81	21.57	-94	8.0	8.30	600	"
1404	7.03	1810	0.70	21.93	-95	10.4	8.32	900	"
1407	6.95	1850	0.57	21.45	-95	12.1	8.42	1200	"
1410	6.95	1860	0.44	21.42	-98	10.0	8.48	1500	"
1413	6.99	1880	0.38	12.42	-103	10.3	8.54	1800	"
1416									stable
1419									collect samp
1424									collect dup
Stability:	± 0.2 units	± 5 %	± 0.2 mg/L	± 3 %	± 20 mV	± 10 %			

Hach Fe^{2+} 0.2 mg/L

Samples were collected directly from pump unless otherwise noted.

SES-TECH

LOW-FLOW PURGING AND SAMPLING DATA SHEET

Project Name: Camp Pendleton 14137 Well Number: MW3
Project Number: 2973.0100 Equipment: Horiba U-22
Date: 6/27/06 Sample ID: 10-14137-032 Time: 1218
Site Engineer(s): WB JB Contractor: None

Reference: Top of Casing	Before	After
Depth to Water (ft)	8.25	9.50
Depth of Well (ft)	23.30	
Depth to Top of Screen (ft)	≈4	
Screen Length (ft)	20	
Pump Depth (ft)	≈10	
Pump Rate	100 mL/min	
Sample Pump Rate	100 mL/min	
System Volume (mL)	493	

Total Volume Purged (mL): 1500

493 = (10 x 2.4) + 470

System Volume (mL) = (2.4*H)+470
where
2.4mL/ft = tubing volume per foot (1/8" I.D.)
H = length of tubing in feet
470 mL = Bladder volume + Flowthru cell volume

WB 6/27/06

Time	pH	Conductivity (umhos)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)	Cum. Volume (mL)	Comments
1157									Pump on
1200	6.92	1500	0.87	20.59	-89	35.2	300	8.55	door light on
1203	6.88	1500	0.82	20.61	-88	36.1	600	8.60	"
1206	6.87	1530	0.71	20.51	-88	37.7	900	8.70	"
1209	6.86	1550	0.68	20.52	-89	37.1	1200	8.75	"
1212	6.86	1580	0.63	20.50	-88	37.5	1500	8.85	"
1215									stable
1218									collect sample
Stability:	± 0.2 units	± 5 %	± 0.2 mg/L	± 3 %	± 20 mV	± 10 %			

Hach Fe^{2+} 0.0

Samples were collected directly from pump unless otherwise noted.

SES-TECH

LOW-FLOW PURGING AND SAMPLING DATA SHEET

Project Name: Camp Pendleton 114137 Well Number: MW5
Project Number: 2973.0100 Equipment: Horiba U-22
Date: 6/27/06 Sample ID: 10-14137-0311 Time: 1122
Site Engineer(s): WB JB Contractor: None

Reference: Top of Casing	Before	After
Depth to Water (ft)	8.24	8.75
Depth of Well (ft)	15	
Depth to Top of Screen (ft)	5	
Screen Length (ft)	10	
Pump Depth (ft)	10	
Pump Rate	140	
Sample Pump Rate	140	
System Volume (mL)	494	

Total Volume Purged (mL): 2520

494 = (10.25)+470

System Volume (mL) = (2.4*H)+470
where
2.4mL/ft = tubing volume per foot (1/8" I.D.)
H = length of tubing in feet
470 mL = Bladder volume + Flowthru cell volume

Time	pH	Conductivity (umhos)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)	Cum. Volume (mL)	Comments
1058									Pump on
1101	7.15	2080	2.30	20.14	7	15.9	8.36	420	Clear, mod.
1104	7.14	2100	1.84	20.12	4	14.1	8.49	840	"
1107	7.13	2150	1.69	20.12	-1	15.0	8.56	1260	"
1110	7.13	2160	1.60	20.13	-7	15.1	8.63	1680	"
1113	7.14	2180	1.54	20.13	-12	15.6	8.70	2100	"
1116	7.16	2170	1.48	20.09	-17	16.0	8.75	2520	"
1119									stable
1122									Collect sample
Stability:	± 0.2 units	± 5 %	± 0.2 mg/L	± 3 %	± 20 mV	± 10 %			

Hach Fe^{2+} 0.0

Samples were collected directly from pump unless otherwise noted.

SES-TECH

LOW-FLOW PURGING AND SAMPLING DATA SHEET

Project Name: Camp Pendleton / 14137 Well Number: MW6
Project Number: 2973.0100 Equipment: Horiba U-22
Date: 6/27/06 Sample ID: 10-14137-029 Time: 0921
Site Engineer(s): WB, JB Contractor: None

Reference: Top of Casing	Before	After
Depth to Water (ft)	7.78	7.96
Depth of Well (ft)	14.18	
Depth to Top of Screen (ft)	5	
Screen Length (ft)	10	
Pump Depth (ft)	10	
Pump Rate	120 mL/min	
Sample Pump Rate	120 mL/min	
System Volume (mL)	494	

Total Volume Purged (mL): 1800

494 = (2.4 x 10) + 470

System Volume (mL) = (2.4*H)+470
where
2.4mL/ft = tubing volume per foot (1/8" I.D.)
H = length of tubing in feet
470 mL = Bladder volume + Flowthru cell volume

Time	pH	Conductivity (umhos)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)	Cum. Volume (mL)	Comments
0900									pumpen
0903	7.40	1650	1.80	20.07	52	21.7	7.87	360	floer, noo
0906	7.37	1630	1.53	20.24	48	20.0	7.87	720	"
0909	7.34	1630	1.52	20.24	45	32.5	7.90	1080	"
0912	7.32	1630	1.55	20.10	43	29.7	7.93	1440	"
0915	7.31	1630	1.50	20.00	42	30.0	7.96	1800	"
0918									stable
0921									collect sample
Stability:	± 0.2 units	± 5 %	± 0.2 mg/L	± 3 %	± 20 mV	± 10 %			

Hach Fe^{2+} 0.0

Samples were collected directly from pump unless otherwise noted.

SES-TECH

LOW-FLOW PURGING AND SAMPLING DATA SHEET

Project Name: Camp Pendleton
Project Number: 2973.0100
Date: 6/27/06
Site Engineer(s): LB ; JB

Well Number: MW7
Equipment: Horiba U-22
Sample ID: 10-14137-033 Time: 1317
Contractor: None

Reference: Top of Casing	Before	After
Depth to Water (ft)	8.20	
Depth of Well (ft)	14.91	
Depth to Top of Screen (ft)	5	
Screen Length (ft)	10	
Pump Depth (ft)	10	
Pump Rate	100 mL/min	
Sample Pump Rate	100 mL/min	
System Volume (mL)	494	

Total Volume Purged (mL): 1800

494 = (2.4 x 10) + 470

System Volume (mL) = (2.4*H)+470
where
2.4mL/ft = tubing volume per foot (1/8" I.D.)
H = length of tubing in feet
470 mL = Bladder volume + Flowthru cell volume

Time	pH	Conductivity (umhos)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mv)	Turbidity (NTU)	Depth to Water (ft)	Cum. Volume (mL)	Comments
1253			0.02	6/27/06					Pump on
			2.29						
1256	7.23	1530	~~22.07~~	22.02	5	6.8	8.50	360	Clear
1259	7.18	1550	~~21.86~~	21.86	12	7.1	8.55	1080	"
1302	7.13	1540	1.18	21.72	12	7.2	8.60	900	"
1305	7.09	1530	0.98	21.63	19	8.1	8.70	1200	"
1308	7.07	1530	0.96	21.58	25	9.2	8.73	1500	"
1311	7.07	1530	0.99	21.56	25	8.9	8.79	1800	"
1314									Stable
1317									collect sample
Stability:	± 0.2 units	± 5 %	± 0.2 mg/L	± 3 %	± 20 mV	± 10 %			

* includes MS/MSD

Hach Fe^{2+} 0.0

Samples were collected directly from pump unless otherwise noted.

APPENDIX B

NON-HAZARDOUS WASTE MANIFEST

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CA2170023533

Manifest Document No.: 63002

2. Page 1 of 1

3. Generator's Name and Mailing Address
AC/S Environmental Security
P.O. Box 555008
Camp Pendleton, CA 92055-5008

4. Generator's Phone (760-725-4321 Attn: Nate Delaston

5. Transporter 1 Company Name: General Environmental Mgmt Inc.

6. US EPA ID Number: CAD983649880

A. State Transporter's ID

B. Transporter 1 Phone: 800-326-1011

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
U.S. Ecology Corp.
Highway 95 - 12 miles south of Beatty
Beatty, NV 89003

10. US EPA ID Number: NVT330010000

E. State Facility's ID

F. Facility's Phone: 800 239 3943

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non hazardous liquid (Well Water)	000	DM	00440 00495	G
b.				
c.				
d.				

GENERATOR

G. Additional Descriptions for Materials Listed Above
11a) x55g Well Water-Approval#

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Emergency Phone: (800) 326-1011 (GEM)
Site:US Marine Corps-Camp Penleton Bldg#22165 Assistant Chief,Camp Pendleton, CA 92055
Berm Equip. Decon water,
16144, 2389, 14121, 14131, 14137, 43402 SWO #164947

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Wendy Bryant TEC Inc

Signature

Date: Month 07 Day 13 Year 06

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials 7/13/06

Printed/Typed Name: Rudy Negrete

Signature

Date: Month 07 Day 13 Year 06

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name

Signature

Date: Month Day Year

APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORMS

TABLE OF CONTENTS

CLIENT: **SES-TECH**

PROJECT: **CAMP PENDLETON, UST SITE 14137**

SDG: **06F281**

** - Not Requested

EMAX
LABORATORIES, INC.
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 07-19-2006
EMAX Batch No.: 06F281

Attn: Nick Weinberger

SES-TECH
1940 E. Deere Avenue, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: Camp Pendleton, UST Site 14137

Enclosed is the Laboratory report for samples received on 06/27/06.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
10-14137-028	F281-01	06/27/06	WATER	VOLATILE ORGANICS BY GC/MS
10-14137-029	F281-02	06/27/06	WATER	VOLATILE ORGANICS BY GC/MS TPH DIESEL SEMIVOLATILE ORGANICS SIM ANIONS BY IC
10-14137-030	F281-03	06/27/06	WATER	VOLATILE ORGANICS BY GC/MS TPH DIESEL SEMIVOLATILE ORGANICS SIM ANIONS BY IC
10-14137-031	F281-04	06/27/06	WATER	VOLATILE ORGANICS BY GC/MS TPH DIESEL SEMIVOLATILE ORGANICS SIM ANIONS BY IC
10-14137-032	F281-05	06/27/06	WATER	VOLATILE ORGANICS BY GC/MS TPH DIESEL SEMIVOLATILE ORGANICS SIM ANIONS BY IC
10-14137-033	F281-06	06/27/06	WATER	VOLATILE ORGANICS BY GC/MS TPH DIESEL

TRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 20016

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Camp Pendleton	PURCHASE ORDER NO: TBD
PROJECT LOCATION: DST Site 14137	PROJECT NO: 2973 0100
SAMPLER NAME: Wendy Bryant	AIRBILL NUMBER: Courier
PROJECT CONTACT: Dick Weinberger	PROJECT CONTACT PHONE NUMBER: 949-756-7505

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY):

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	VOCs 8260B	TPH-d 8015B	PAHs 8270C	TPH-mo 8015B					COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
10-14137-028	6/27/06	0830	3	X		W	10 Day	X									TripBlank	\	\	TB
10-14137-029	6/27/06	0921	6	X		W	10 Day	X	X	X	X						14137-MW6	\	\	Reg
10-14137-030	6/27/06	1015	6	X		W	10 Day	X	X	X	X						14137-MW1	\	\	Reg
10-14137-031	6/27/06	1122	6	X		W	10 Day	X	X	X	X						14137-MW5	\	\	Reg
10-14137-032	6/27/06	1218	6	X		W	10 Day	X	X	X	X						14137-MW3	\	\	Reg
10-14137-033	6/27/06	1317	16	X		W	10 Day	X	X	X	X					Includes MS/MSD	14137-MW7	\	\	Reg
10-14137-034	6/27/06	1419	6		X	W	10 Day	X	X	X	X						14137-MW2	\	\	Reg
10-14137-035	6/27/06	1474	6	X		W	10 Day	X	X	X	X						14137-MW4	\	\	Reg
10-14137-036	6/27/06	1506	6	X		W	10 Day	X	X	X							Equip Rinse	\	\	Equip Blk ER
																6/27/06				

RELINQUISHED BY (Signature)	DATE 6/27/06	RECEIVED BY (Signature)	
COMPANY TetTech	TIME 1529	COMPANY EMAX	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

Sample ID	Control #	Col Date	Matrix	Analysis
10-14137-034	F281-07	06/27/06	WATER	SEMIVOLATILE ORGANICS SIM ANIONS BY IC VOLATILE ORGANICS BY GC/MS TPH DIESEL
10-14137-035	F281-08	06/27/06	WATER	SEMIVOLATILE ORGANICS SIM ANIONS BY IC VOLATILE ORGANICS BY GC/MS TPH DIESEL
10-14137-036	F281-09	06/27/06	WATER	SEMIVOLATILE ORGANICS SIM ANIONS BY IC VOLATILE ORGANICS BY GC/MS TPH DIESEL
10-14137-033MS	F281-06M	06/27/06	WATER	SEMIVOLATILE ORGANICS SIM VOLATILE ORGANICS BY GC/MS TPH DIESEL
10-14137-033MSD	F281-06S	06/27/06	WATER	SEMIVOLATILE ORGANICS SIM ANIONS BY IC VOLATILE ORGANICS BY GC/MS TPH DIESEL
10-14137-033DUP	F281-06D	06/27/06	WATER	SEMIVOLATILE ORGANICS SIM ANIONS BY IC

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

SAMPLE RECEIPT FORM 1

Type of Delivery	Delivered By/Airbill		
☑ EMAX Courier		ECN	06F281
☐ Client Delivery		Recepient	Luna
☐ Third Party		Date	062706
		Time	1115

COC Inspection

☑ Client Name ☑ Sampler Name ☑ Sampling Date/Time/Location
☑ Address ☑ Courier Signature/Date/Time ☑ Analysis Required
☑ Client PM/FC ☐ TAT ☑ Matrix
☑ Tel #/Fax # ☑ Sample ID ☐ Preservative (if any)

Safety Issues ☑ None ☐ High Concentrations expected ☐ Superfund Site Samples

Comments: ☐ Rad Screening Required

Packaging Inspection

Container ☑ Cooler ☐ Box ☐ ☐
Condition ☐ Custody Seal ☑ Intact ☐ Damaged ☐
Packaging ☑ Bubble Pack ☐ Styrofoam ☑ Sufficient ☑ Pb
Temperatures ☑ Cooler 1 3.4 ☑ Cooler 2 3.6 ☐ Cooler 3 ____ ☐ Cooler 4 ____
☐ Cooler 5 ____ ☐ Cooler 6 ____ ☐ Cooler 7 ____ ☐ Cooler 8 ____
☐ Cooler 9 ____ ☐ Cooler 10 ____ ☐ Cooler 11 ____ ☐ Cooler 12 ____

Comments:

LSCID	Client ID	Discrepancy	Corrective Action
--			
		062706	

LSCID Lab Sample Container ID

REVIEWS

Sample Labeling [signature] Date 062706

SRE [signature] Date 6/27/06

PM [signature] Date 6/28/06

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

SES-TECH

CAMP PENDLETON, UST SITE 14137

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

SDG#: 06F281

CASE NARRATIVE

CLIENT: SES-TECH

PROJECT: CAMP PENDLETON, UST SITE 14137

SDG: 06F281

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Nine (9) water samples were received on 06/27/06 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd edition.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. **Method Blank**

   Method blanks were free of contamination at half of the reporting limit.

4. **Surrogate Recovery**

   Recoveries were within QC limits.

5. **Lab Control Sample/Lab Control Sample Duplicate**

   All recoveries were within QC limits.

6. **Matrix Spike/Matrix Spike Duplicate**

   Sample F281-06R was spiked. All recoveries were within QC limit.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All requirements were met.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : SES-TECH
Project : CAMP PENDLETON, UST SITE 14137

SDG NO. : 06F281
Instrument ID : T-094

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	VO94F51Q	1	NA	06/29/0616:53	06/29/0616:53	RFD556	RFD135	VO94F51	Method Blank
LCS1W	VO94F51L	1	NA	06/29/0614:56	06/29/0614:56	RFD553	RFD135	VO94F51	Lab Control Sample (LCS)
LCD1W	VO94F51C	1	NA	06/29/0615:35	06/29/0615:35	RFD554	RFD135	VO94F51	LCS Duplicate
10-14137-028	F281-01	1	NA	06/29/0617:32	06/29/0617:32	RFD557	RFD135	VO94F51	Field Sample
10-14137-029	F281-02	1	NA	06/29/0618:11	06/29/0618:11	RFD558	RFD135	VO94F51	Field Sample
10-14137-030	F281-03	1	NA	06/29/0618:50	06/29/0618:50	RFD559	RFD135	VO94F51	Field Sample
10-14137-031	F281-04	1	NA	06/29/0619:29	06/29/0619:29	RFD560	RFD135	VO94F51	Field Sample
10-14137-032	F281-05	1	NA	06/29/0620:08	06/29/0620:08	RFD561	RFD135	VO94F51	Field Sample
10-14137-034	F281-07	1	NA	06/29/0620:47	06/29/0620:47	RFD562	RFD135	VO94F51	Field Sample
10-14137-035	F281-08	1	NA	06/29/0621:26	06/29/0621:26	RFD563	RFD135	VO94F51	Field Sample
10-14137-036	F281-09	1	NA	06/29/0622:05	06/29/0622:05	RFD564	RFD135	VO94F51	Field Sample
10-14137-033MS	F281-06M	1	NA	06/30/0600:03	06/30/0600:03	RFD567	RFD135	VO94F51	Matrix Spike Sample (MS)
10-14137-033MSD	F281-06S	1	NA	06/30/0600:43	06/30/0600:43	RFD568	RFD135	VO94F51	MS Duplicate (MSD)
MBLK2W	VO94G03Q	1	NA	07/07/0617:54	07/07/0617:54	RGD019	RFD135	VO94G03	Method Blank
LCS2W	VO94G03L	1	NA	07/07/0615:58	07/07/0615:58	RGD016	RFD135	VO94G03	Lab Control Sample (LCS)
LCD2W	VO94G03C	1	NA	07/07/0616:37	07/07/0616:37	RGD017	RFD135	VO94G03	LCS Duplicate
10-14137-033	F281-06R	1	NA	07/07/0619:11	07/07/0619:11	RGD021	RFD135	VO94G03	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 17:32
Sample ID: 10-14137-028	Date Analyzed: 06/29/06 17:32
Lab Samp ID: F281-01	Dilution Factor: 1
Lab File ID: RFD557	Matrix : WATER
Ext Btch ID: V094F51	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	96	65-135
TOLUENE-D8	100	75-125
BROMOFLUOROBENZENE	107	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 18:11
Sample ID: 10-14137-029	Date Analyzed: 06/29/06 18:11
Lab Samp ID: F281-02	Dilution Factor: 1
Lab File ID: RFD558	Matrix : WATER
Ext Btch ID: V094F51	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
[illegible]	ND	1	.2
[illegible]YLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	65-135
TOLUENE-D8	107	75-125
BROMOFLUOROBENZENE	116	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 18:50
[illegible]le ID:	10-14137-030	Date Analyzed:	06/29/06 18:50
[illegible] Samp ID:	F281-03	Dilution Factor:	1
Lab File ID:	RFD559	Matrix :	WATER
Ext Btch ID:	V094F51	% Moisture :	NA
Calib. Ref.:	RFD135	Instrument ID :	T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
[illegible]BE	ND	1	.2
[illegible]HYLENE CHLORIDE	ND	5	.5
[illegible]YRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	65-135
TOLUENE-D8	100	75-125
BROMOFLUOROBENZENE	106	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 19:29
Sample ID: 10-14137-031	Date Analyzed: 06/29/06 19:29
Lab Sample ID: F281-04	Dilution Factor: 1
Lab File ID: RFD560	Matrix : WATER
Ext Btch ID: V094F51	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
[illegible]YLENE CHLORIDE	ND	1	.2
STYRENE	ND	5	.5
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	5	.2
TRANS-1,2-DICHLOROETHENE	ND	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	5	.2
TRICHLOROETHENE	ND	.5	.2
VINYL ACETATE	ND	5	.2
VINYL CHLORIDE	ND	50	.5
TERT-BUTYL ALCOHOL	ND	.5	.2
DIISOPROPYL ETHER	ND	20	5
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2
		5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	99	65-135
TOLUENE-D8	99	75-125
BROMOFLUOROBENZENE	104	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 20:08
Sample ID	: 10-14137-032	Date Analyzed:	06/29/06 20:08
Lab Samp ID	: F281-05	Dilution Factor:	1
Lab File ID	: RFD561	Matrix	: WATER
Ext Btch ID	: V094F51	% Moisture	: NA
Calib. Ref.:	RFD135	Instrument ID	: T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	95	65-135
TOLUENE-D8	93	75-125
BROMOFLUOROBENZENE	98	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
P[illegible]h No. : 06F281	Date Extracted: 07/07/06 19:11
[illegible]e ID: 10-14137-033	Date Analyzed: 07/07/06 19:11
L[illegible] Samp ID: F281-06R	Dilution Factor: 1
Lab File ID: RGD021	Matrix : WATER
Ext Btch ID: VO94G03	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
[illegible]YLENE CHLORIDE	.48J	1	.2
STYRENE	ND	5	.5
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	5	.2
TRANS-1,2-DICHLOROETHENE	ND	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	5	.2
TRICHLOROETHENE	ND	.5	.2
VINYL ACETATE	ND	5	.2
VINYL CHLORIDE	ND	50	.5
TERT-BUTYL ALCOHOL	ND	.5	.2
DIISOPROPYL ETHER	ND	20	5
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	65-135
TOLUENE-D8	104	75-125
BROMOFLUOROBENZENE	109	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 20:47
Sample ID	: 10-14137-034	Date Analyzed:	06/29/06 20:47
Lab Samp ID	: F281-07	Dilution Factor:	1
Lab File ID	: RFD562	Matrix	: WATER
Ext Btch ID	: V094F51	% Moisture	: NA
Calib. Ref.	: RFD135	Instrument ID	: T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
[illegible]BE	9.9	1	.2
[illegible]HYLENE CHLORIDE	ND	5	.5
[illegible]RENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	94	65-135
TOLUENE-D8	95	75-125
BROMOFLUOROBENZENE	99	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

Data File : D:\HPCHEM\1\DATA\06F29\RFD562.D Vial: 14
Acq On : 29 Jun 2006 8:47 pm Operator: AS
Sample : 06F281-07 25mls Inst : TO94
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524TAIL.P
Quant Time: Jun 30 11:57 2006 Quant Results File: VO94F15.RES

Quant Method : D:\HPCHEM\1\METHODS\VO94F15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jun 16 15:55:32 2006
Response via : Initial Calibration
DataAcq Meth : VO94F15

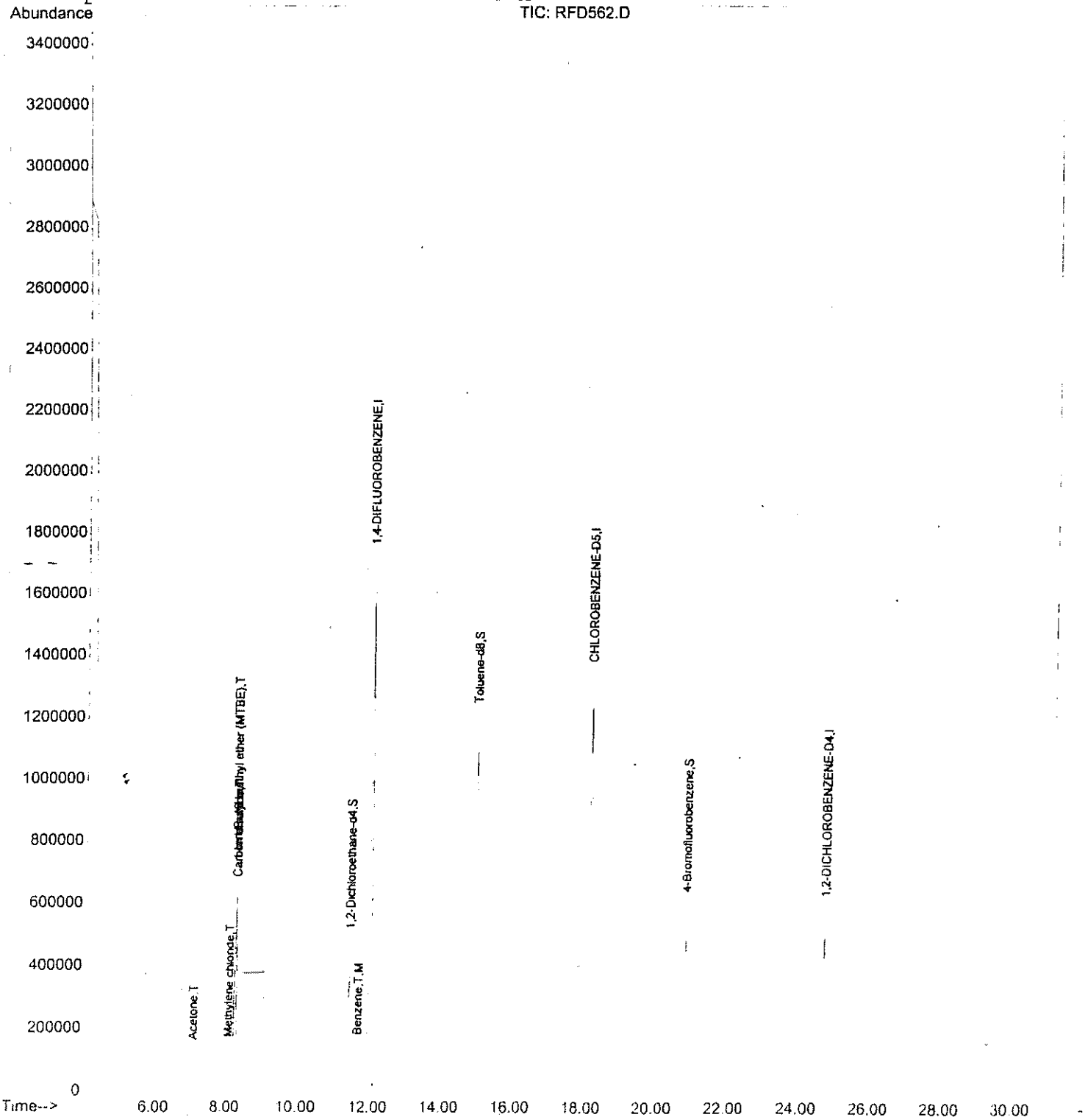
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	12.00	114	2529425	10.00	ug/l	-0.02
36) CHLOROBENZENE-D5	18.14	117	2036154	10.00	ug/l	0.03
66) 1,2-DICHLOROBENZENE-D4	24.69	152	347003	10.00	ug/l	-0.02
System Monitoring Compounds						
35) 1,2-Dichloroethane-d4	11.43	65	448730	9.44	ug/l	0.00
Spiked Amount 10.000			Recovery	= 94.40%		
49) Toluene-d8	14.93	98	2420024	9.52	ug/l	0.00
Spiked Amount 10.000			Recovery	= 95.20%		
70) 4-Bromofluorobenzene	20.86	95	535483	9.86	ug/l	-0.02
Spiked Amount 10.000			Recovery	= 98.60%		
Target Compounds						Qvalue
11) Acetone	7.08	43	28698	1.74	ug/l	99
16) Methylene chloride	8.08	49	12742	0.14	ug/l	99
17) Carbon disulfide	8.28	76	542208	2.05	ug/l	93
19) tert-Butyl methyl ether (M	8.27	73	977619	9.95	ug/l	100
40) Benzene	11.67	78	41768	0.13	ug/l	70

(#) = qualifier out of range (m) = manual integration

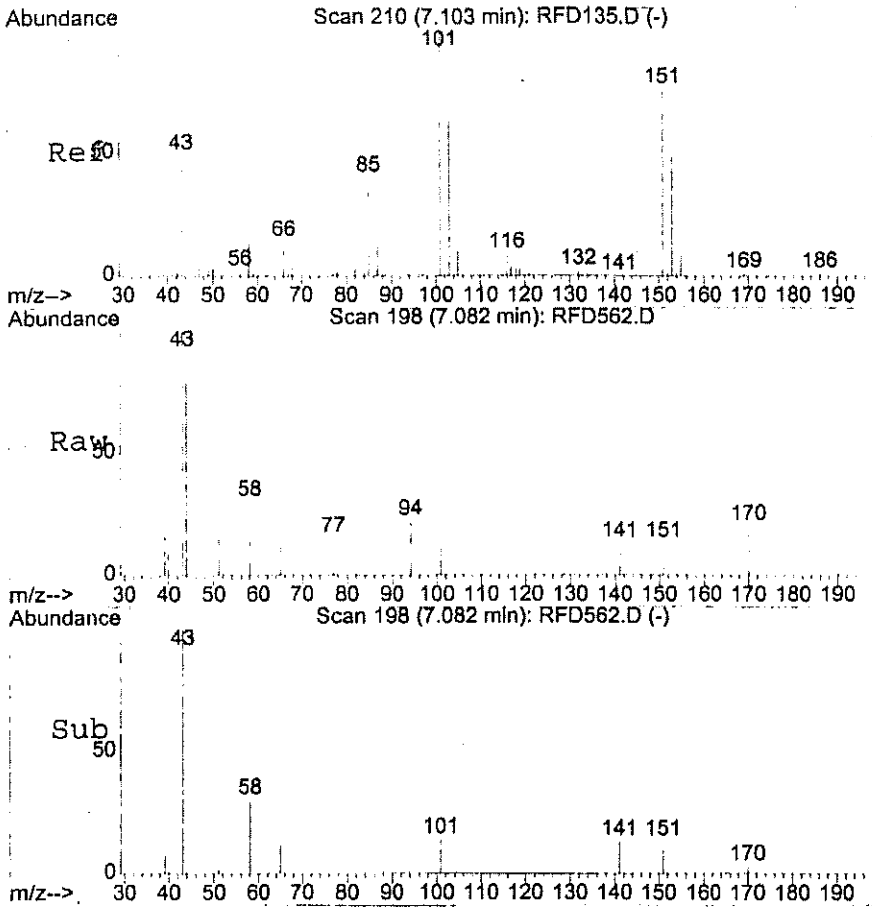
2011

Data File : D:\HPCHEM\1\DATA\06F29\RFD562.D Vial: 14
Acq On : 29 Jun 2006 8:47 pm Operator: AS
Sample : 06F281-07 25mls Inst : TO94
Misc : DF=1.0 Multiplr: 1.00
MS Integration Params: 524TAIL.P
Quant Time: Jun 30 11:57 2006 Quant Results File: VO94F15.R

Method : D:\HPCHEM\1\METHODS\VO94F15.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jun 16 15:55:32 2006
Response via : Initial Calibration



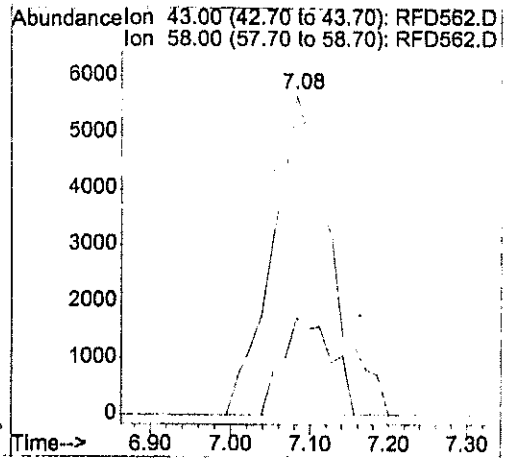
2012

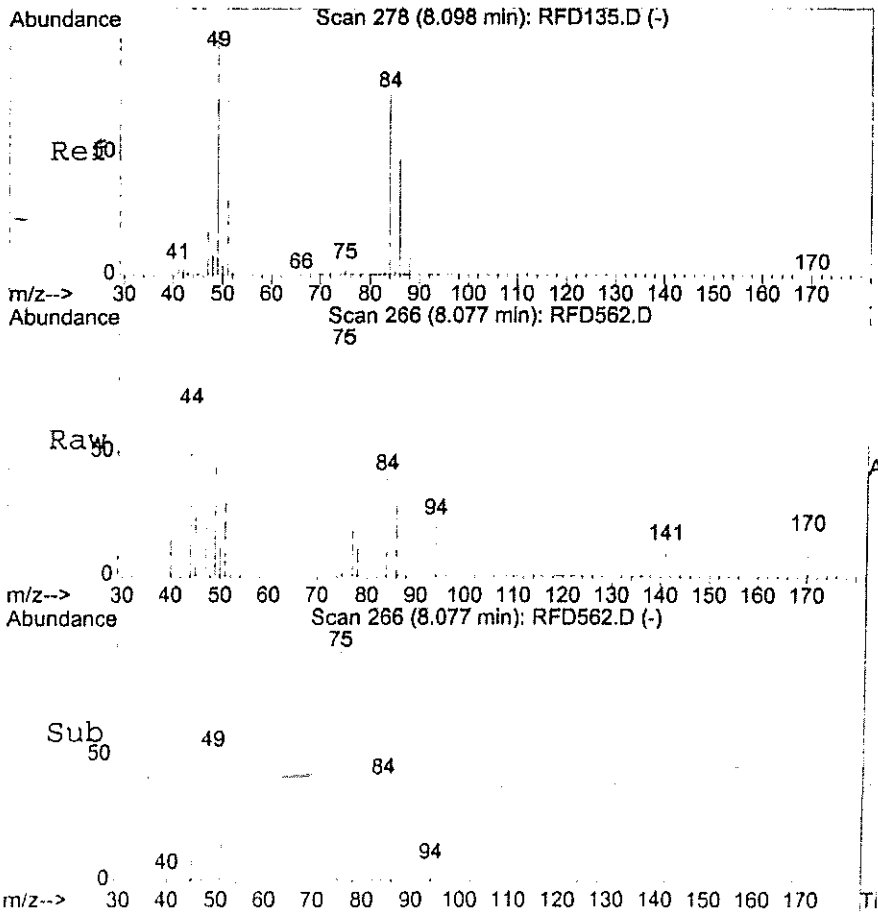


#11
Acetone
Concen: 1.74 ug/l
RT: 7.08 min Scan# 198
Delta R.T. -0.02 min
Lab File: RFD562.D
Acq: 29 Jun 2006 8:47 pm

Tgt Ion: 43 Resp: 28698

Ion	Ratio	Lower	Upper
43	100		
58	26.2	0.0	55.6

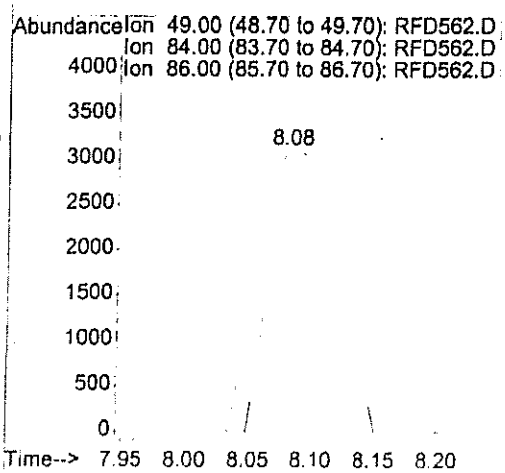




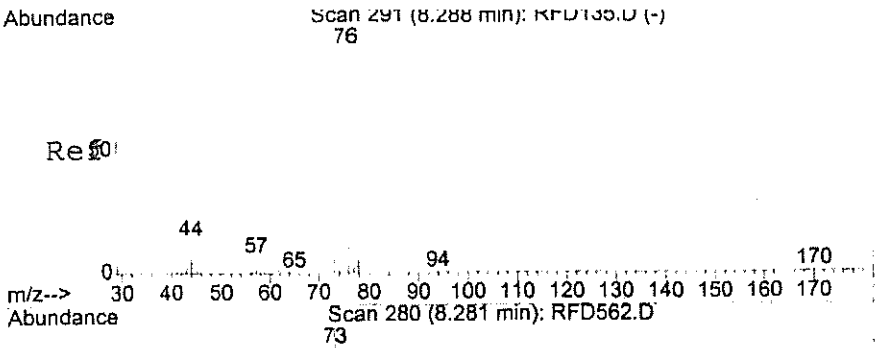
#16
Methylene chloride
Concen: 0.14 ug/l
RT: 8.08 min Scan# 266
Delta R.T. -0.02 min
Lab File: RFD562.D
Acq: 29 Jun 2006 8:47 pm

Tgt Ion: 49 Resp: 12742

Ion	Ratio	Lower	Upper
49	100		
84	72.7	44.1	104.1
86	46.6	17.4	77.4



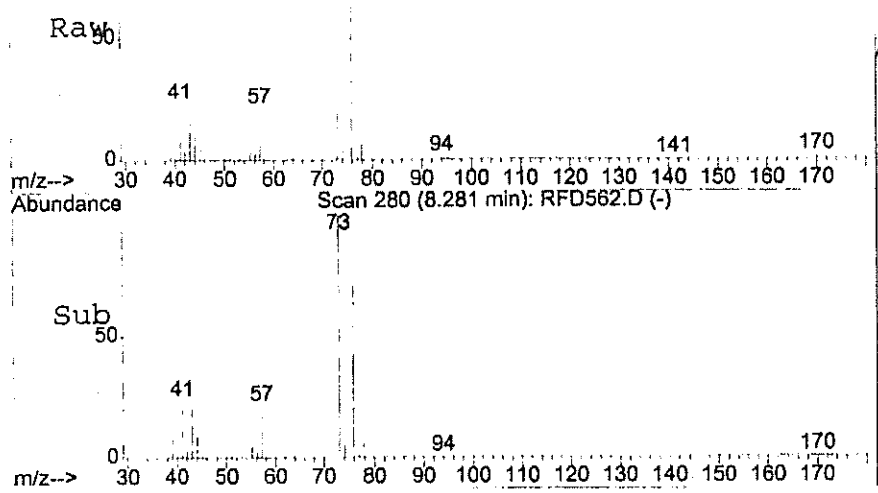
2013

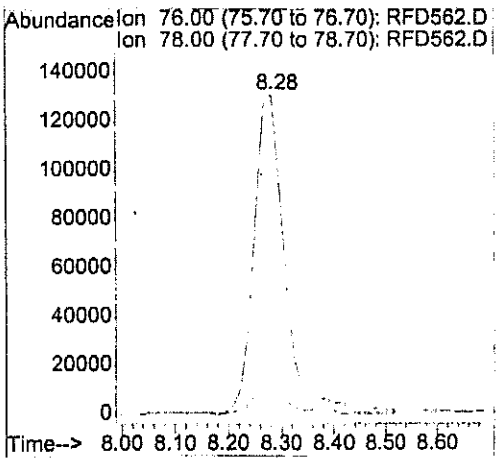


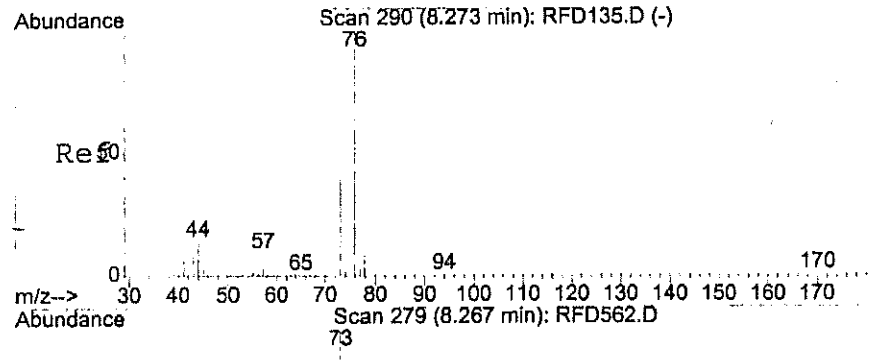
#17
Carbon disulfide
Concen: 2.05 ug/l
RT: 8.28 min Scan# 280
Delta R.T. -0.01 min
Lab File: RFD562.D
Acq: 29 Jun 2006 8:47 pm

Tgt Ion: 76 Resp: 542208

Ion	Ratio	Lower	Upper
76	100		
78	11.9	0.0	39.2



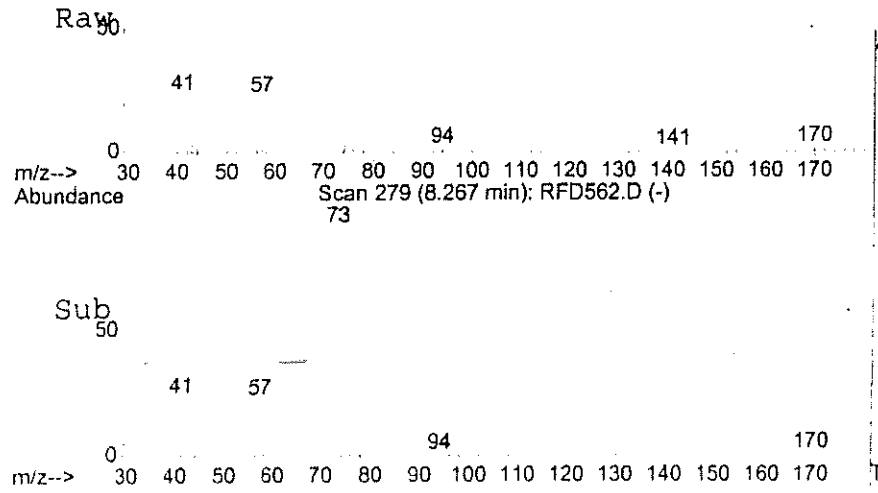


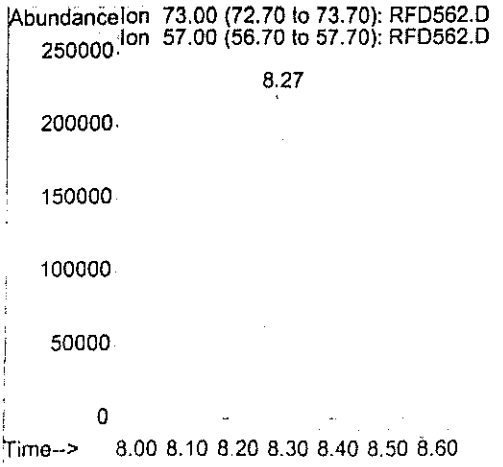


#19
tert-Butyl methyl ether (MT
Concen: 9.95 ug/l
RT: 8.27 min Scan# 279
Delta R.T. -0.01 min
Lab File: RFD562.D
Acq: 29 Jun 2006 8:47 pm

Tgt Ion: 73 Resp: 977619

Ion	Ratio	Lower	Upper
73	100		
57	22.1	0.0	52.1

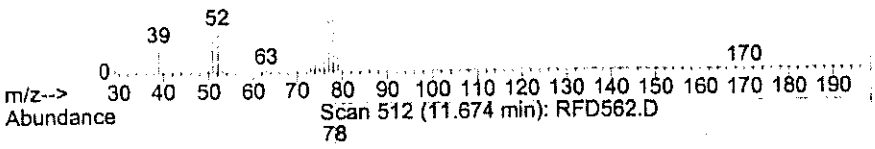


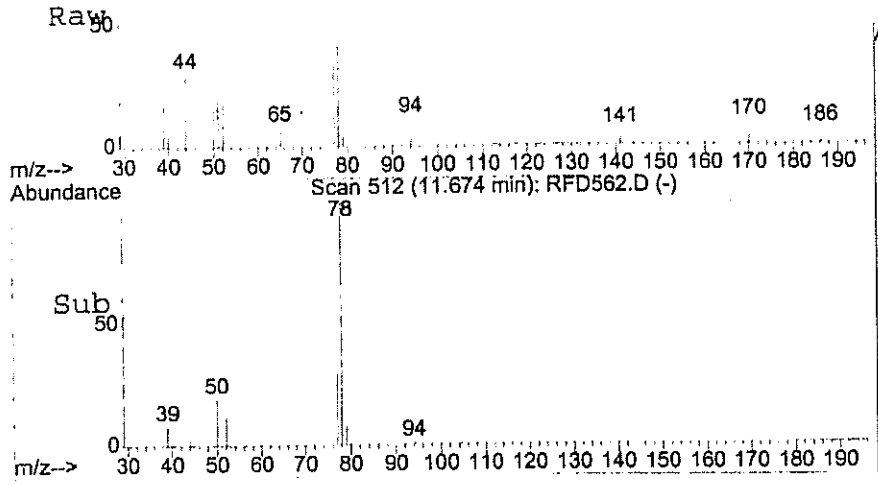


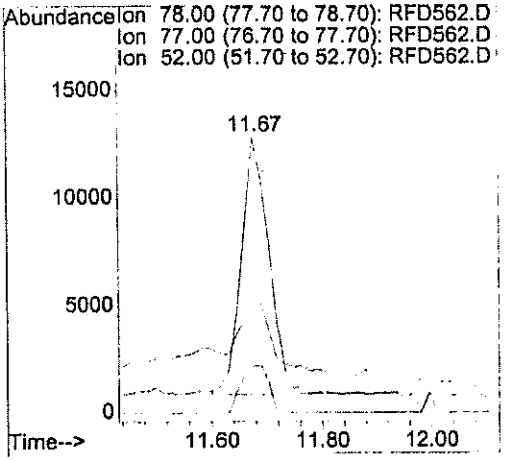
Benzene
Concen: 0.13 ug/l
RT: 11.67 min Scan# 512
Delta R.T. -0.02 min
Lab File: RFD562.D
Acq: 29 Jun 2006 8:47 pm

Tgt Ion: 78 Resp: 41768

Ion	Ratio	Lower	Upper
78	100		
77	48.6	0.0	53.9
52	18.1	0.0	47.1







SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 21:26
Sample ID	: 10-14137-035	Date Analyzed:	06/29/06 21:26
Lab Samp ID	: F281-08	Dilution Factor:	1
Lab File ID	: RFD563	Matrix	: WATER
Ext Btch ID	: VO94F51	% Moisture	: NA
Calib. Ref.	: RFD135	Instrument ID	: T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	9.9	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	65-135
TOLUENE-D8	102	75-125
BROMOFLUOROBENZENE	106	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 22:05
[illegible] ID: 10-14137-036	Date Analyzed: 06/29/06 22:05
[illegible]Samp ID: F281-09	Dilution Factor: 1
[illegible] File ID: RFD564	Matrix : WATER
Ext Btch ID: V094F51	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	.24J	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	.21J	1	.2
[illegible]HYLENE CHLORIDE	ND	5	.5
[illegible]RENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	65-135
TOLUENE-D8	101	75-125
BROMOFLUOROBENZENE [illegible]	106	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

QC SUMMARIES

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: NA
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/29/06
Batch No. : 06F281	Date Extracted: 06/29/06 16:53
[illegible]le ID: MBLK1W	Date Analyzed: 06/29/06 16:53
[illegible]Samp ID: VO94F51Q	Dilution Factor: 1
[illegible]File ID: RFD556	Matrix : WATER
Ext Btch ID: VO94F51	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
[illegible]HYLENE CHLORIDE	ND	5	.5
[illegible]RENE	ND	5	.2
[illegible]ETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	95	65-135
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	106	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	V094F51Q	V094F51L	V094F51C		
LAB FILE ID:	RFD556	RFD553	RFD554		
DATE EXTRACTED:	06/29/0616:53	06/29/0614:56	06/29/0615:35	DATE COLLECTED:	NA
DATE ANALYZED:	06/29/0616:53	06/29/0614:56	06/29/0615:35	DATE RECEIVED:	06/29/06
PREP. BATCH:	V094F51	V094F51	V094F51		
CALIB. REF:	RFD135	RFD135	RFD135		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	10	9.46	95	10	9.42	94	0	75-125	20
Benzene	ND	10	9.28	93	10	9.03	90	3	75-125	20
Chlorobenzene	ND	10	9.91	99	10	9.75	98	2	75-125	20
Toluene	ND	10	9.83	98	10	9.57	96	3	75-125	20
Trichloroethene	ND	10	9.63	96	10	9.35	93	3	75-125	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10	9.01	90	10	8.75	87	65-135
Toluene-d8	10	9.25	92	10	8.93	89	75-125
Bromofluorobenzene	10	9.95	99	10	9.62	96	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SES-TECH	Date Collected:	NA
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	07/07/06
Batch No.	: 06F281	Date Extracted:	07/07/06 17:54
Sample ID	: MBLK2W	Date Analyzed:	07/07/06 17:54
Samp ID	: VO94G03Q	Dilution Factor:	1
Lab File ID	: RGD019	Matrix	: WATER
Ext Btch ID	: VO94G03	% Moisture	: NA
Calib. Ref.	: RFD135	Instrument ID	: T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
METHYL ETHYL KETONE	ND	50	.2
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	5	.2
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHYLENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL ACETATE	ND	50	.5
VINYL CHLORIDE	ND	.5	.2
TERT-BUTYL ALCOHOL	ND	20	5
DIISOPROPYL ETHER	ND	5	.2
ETHYL TERT-BUTYL ETHER	ND	5	.2
TERT-AMYL METHYL ETHER	ND	5	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	95	65-135
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	108	75-125

R.L. : Reporting limit
* : Out of QC
E : Exceeded calibration range
B : Found in associated method blank
J : Value between R.L. and MDL
D : Value from dilution analysis
D.O. : Diluted out

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: SW 5030B/8260B

MATRIX: WATER
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK2W
LAB SAMP ID: V094G03Q V094G03L V094G03C
LAB FILE ID: RGD019 RGD016 RGD017
DATE EXTRACTED: 07/07/0617:54 07/07/0615:58 07/07/0616:37
DATE ANALYZED: 07/07/0617:54 07/07/0615:58 07/07/0616:37
PREP. BATCH: V094G03 V094G03 V094G03
CALIB. REF: RFD135 RFD135 RFD135

% MOISTURE: NA
DATE COLLECTED: NA
DATE RECEIVED: 07/07/06

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	10	11.9	119	10	11.5	115	4	75-125	20
Benzene	ND	10	10	100	10	9.84	98	2	75-125	20
Chlorobenzene	ND	10	10.9	109	10	10.3	103	6	75-125	20
Toluene	ND	10	11	110	10	10.5	105	5	75-125	20
Trichloroethene	ND	10	10.2	102	10	10.1	101	1	75-125	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10	8.85	88	10	8.88	89	65-135
Toluene-d8	10	9.3	93	10	9.28	93	75-125
Bromofluorobenzene	10	9.99	100	10	9.91	99	75-125

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: SW 5030B/8260B

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: 10-14137-033
LAB SAMP ID: F281-06R F281-06M F281-06S
LAB FILE ID: RGD021 RFD567 RFD568
DATE EXTRACTED: 07/07/0619:11 06/30/0600:03 06/30/0600:43 DATE COLLECTED: 06/27/06
DATE ANALYZED: 07/07/0619:11 06/30/0600:03 06/30/0600:43 DATE RECEIVED: 06/27/06
PREP. BATCH: VO94G03 VO94F51 VO94F51
CALIB. REF: RFD135 RFD135 RFD135

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RI (%)
1,1-Dichloroethene	ND	10	11.2	112	10	11.3	113	0	75-125	2(
Benzene	ND	10	11.1	111	10	11.7	117	5	75-125	2(
Chlorobenzene	ND	10	11.7	117	10	12	120	2	75-125	2(
Toluene	ND	10	11.6	116	10	11.8	118	2	75-125	2(
Trichloroethene	ND	10	11.4	114	10	11.9	119	5	75-125	2(

SURROGATE PARAMETER	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10	10.9	109	10	11	110	65-135
Toluene-d8	10	11.3	113	10	11.4	114	75-125
Bromofluorobenzene	10	11.6	116	10	11.6	116	75-125

LABORATORY REPORT FOR

SES-TECH

CAMP PENDLETON, UST SITE 14137

METHOD 3520C/8270 SIM
SEMI VOLATILE ORGANICS BY GC/MS

SDG#: 06F281

CASE NARRATIVE

CLIENT: SES-TECH

PROJECT: CAMP PENDLETON, UST SITE 14137

SDG: 06F281

METHOD 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

Eight (8) water samples were received on 06/27/06 for Semi Volatile Organic analysis by Method 3520C/8270C SIM in accordance with USEPA SW846, 3rd edition.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. **Method Blank**

   Method blank was free of contamination at half of the reporting limit.

4. **Surrogate Recovery**

   Recoveries were within QC limit.

5. **Lab Control Sample/Lab Control Sample Duplicate**

   Recoveries were within QC limit.

6. **Matrix Spike/Matrix Spike Duplicate**

   No MS/MSD sample was designated in this SDG.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

LAB CHRONICLE
SEMI VOLATILE ORGANICS BY GC/MS

Client : SES-TECH
Project : CAMP PENDLETON, UST SITE 14137

SDG NO. : 06F281
Instrument ID : T-048

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	SVF039WB	1	NA	06/30/0618:34	06/29/0612:00	RFZ505	RFZ008	SVF039W	Method Blank
LCS1W	SVF039WL	1	NA	06/30/0618:54	06/29/0612:00	RFZ506	RFZ008	SVF039W	Lab Control Sample (LCS)
10-14137-029	F281-02	.94	NA	06/30/0619:13	06/29/0612:00	RFZ507	RFZ008	SVF039W	Field Sample
10-14137-031	F281-04	.94	NA	06/30/0619:51	06/29/0612:00	RFZ509	RFZ008	SVF039W	Field Sample
10-14137-032	F281-05	1	NA	06/30/0620:10	06/29/0612:00	RFZ510	RFZ008	SVF039W	Field Sample
10-14137-033	F281-06	.94	NA	06/30/0620:29	06/29/0612:00	RFZ511	RFZ008	SVF039W	Field Sample
10-14137-033MS	F281-06M	.95	NA	06/30/0620:48	06/29/0612:00	RFZ512	RFZ008	SVF039W	Matrix Spike Sample (MS)
10-14137-033MSD	F281-06S	.94	NA	06/30/0621:08	06/29/0612:00	RFZ513	RFZ008	SVF039W	MS Duplicate (MSD)
10-14137-034	F281-07	.94	NA	06/30/0621:27	06/29/0612:00	RFZ514	RFZ008	SVF039W	Field Sample
10-14137-036	F281-09	.94	NA	06/30/0622:05	06/29/0612:00	RFZ516	RFZ008	SVF039W	Field Sample
10-14137-030	F281-03W	.94	NA	07/07/0620:24	06/29/0612:00	RGZ006	RFZ008	SVF039W	Field Sample
10-14137-035	F281-08W	.96	NA	07/07/0620:43	06/29/0612:00	RGZ007	RFZ008	SVF039W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

SW 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 12:00
Sample ID: 10-14137-029	Date Analyzed: 06/30/06 19:13
Lab Samp ID: F281-02	Dilution Factor: .94
Lab File ID: RFZ507	Matrix : WATER
Ext Btch ID: SVF039W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.94	.19
ACENAPHTHYLENE	ND	.94	.19
ANTHRACENE	ND	1.9	.19
BENZO(A)ANTHRACENE	ND	1.9	.19
BENZO(A)PYRENE	ND	.94	.19
BENZO(B)FLUORANTHENE	ND	.94	.19
BENZO(K)FLUORANTHENE	ND	1.9	.19
BENZO(G,H,I)PERYLENE	ND	.94	.19
CHRYSENE	ND	1.9	.19
DIBENZO(A,H)ANTHRACENE	ND	.94	.19
FLUORANTHENE	ND	1.9	.19
FLUORENE	ND	1.9	.19
INDENO(1,2,3-CD)PYRENE	ND	.94	.19
NAPHTHALENE	ND	.94	.19
PHENANTHRENE	ND	.94	.19
PYRENE	ND	1.9	.19

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	79	50-130

RL: Reporting Limit

SW 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 12:00
Sample ID: 10-14137-030	Date Analyzed: 07/07/06 20:24
Lab Samp ID: F281-03W	Dilution Factor: .94
Lab File ID: RGZ006	Matrix : WATER
Ext Btch ID: SVF039W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.94	.19
ACENAPHTHYLENE	ND	.94	.19
ANTHRACENE	ND	1.9	.19
BENZO(A)ANTHRACENE	ND	1.9	.19
BENZO(A)PYRENE	ND	.94	.19
BENZO(B)FLUORANTHENE	ND	.94	.19
BENZO(K)FLUORANTHENE	ND	1.9	.19
BENZO(G,H,I)PERYLENE	ND	.94	.19
CHRYSENE	ND	1.9	.19
DIBENZO(A,H)ANTHRACENE	ND	.94	.19
FLUORANTHENE	ND	1.9	.19
FLUORENE	ND	1.9	.19
INDENO(1,2,3-CD)PYRENE	ND	.94	.19
NAPHTHALENE	ND	.94	.19
PHENANTHRENE	ND	.94	.19
PYRENE	ND	1.9	.19

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	80	50-130

RL: Reporting Limit

SW 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 12:00
Sample ID:	10-14137-031	Date Analyzed:	06/30/06 19:51
Lab Samp ID:	F281-04	Dilution Factor:	.94
Lab File ID:	RFZ509	Matrix :	WATER
Ext Btch ID:	SVF039W	% Moisture :	NA
Calib. Ref.:	RFZ008	Instrument ID :	T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.94	.19
ACENAPHTHYLENE	ND	.94	.19
ANTHRACENE	ND	1.9	.19
BENZO(A)ANTHRACENE	ND	1.9	.19
BENZO(A)PYRENE	ND	.94	.19
BENZO(B)FLUORANTHENE	ND	.94	.19
BENZO(K)FLUORANTHENE	ND	1.9	.19
BENZO(G,H,I)PERYLENE	ND	.94	.19
CHRYSENE	ND	1.9	.19
DIBENZO(A,H)ANTHRACENE	ND	.94	.19
FLUORANTHENE	ND	1.9	.19
FLUORENE	ND	1.9	.19
INDENO(1,2,3-CD)PYRENE	ND	.94	.19
)PHTHALENE	ND	.94	.19
HENANTHRENE	ND	.94	.19
PYRENE	ND	1.9	.19

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	80	50-130

RL: Reporting Limit

SW 3520C/8270C SIM

SEMI VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 12:00
Sample ID: 10-14137-032	Date Analyzed: 06/30/06 20:10
Lab Samp ID: F281-05	Dilution Factor: 1
Lab File ID: RFZ510	Matrix : WATER
Ext Btch ID: SVF039W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	1	.2
ACENAPHTHYLENE	ND	1	.2
ANTHRACENE	ND	2	.2
BENZO(A)ANTHRACENE	ND	2	.2
BENZO(A)PYRENE	ND	1	.2
BENZO(B)FLUORANTHENE	ND	1	.2
BENZO(K)FLUORANTHENE	ND	2	.2
BENZO(G,H,I)PERYLENE	ND	1	.2
CHRYSENE	ND	2	.2
DIBENZO(A,H)ANTHRACENE	ND	1	.2
FLUORANTHENE	ND	2	.2
FLUORENE	ND	2	.2
INDENO(1,2,3-CD)PYRENE	ND	1	.2
)PHTHALENE	ND	1	.2
PHENANTHRENE	ND	1	.2
PYRENE	ND	2	.2

SURROGATE-PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	66	50-130

RL: Reporting Limit

SW 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 12:00
Sample ID: 10-14137-033	Date Analyzed: 06/30/06 20:29
Lab Samp ID: F281-06	Dilution Factor: .94
Lab File ID: RFZ511	Matrix : WATER
Ext Btch ID: SVF039W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.94	.19
ACENAPHTHYLENE	ND	.94	.19
ANTHRACENE	ND	1.9	.19
BENZO(A)ANTHRACENE	ND	1.9	.19
BENZO(A)PYRENE	ND	.94	.19
BENZO(B)FLUORANTHENE	ND	.94	.19
BENZO(K)FLUORANTHENE	ND	1.9	.19
BENZO(G,H,I)PERYLENE	ND	.94	.19
CHRYSENE	ND	1.9	.19
DIBENZO(A,H)ANTHRACENE	ND	.94	.19
FLUORANTHENE	ND	1.9	.19
FLUORENE	ND	1.9	.19
INDENO(1,2,3-CD)PYRENE	ND	.94	.19
)PHTHALENE	ND	.94	.19
PHENANTHRENE	ND	.94	.19
PYRENE	ND	1.9	.19

SURROGATE-PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	69	50-130

RL: Reporting Limit

SW 3520C/8270C SIM

SEMI VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 12:00
Sample ID: 10-14137-034	Date Analyzed: 06/30/06 21:27
Lab Samp ID: F281-07	Dilution Factor: .94
Lab File ID: RFZ514	Matrix : WATER
Ext Btch ID: SVF039W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.94	.19
ACENAPHTHYLENE	ND	.94	.19
ANTHRACENE	ND	1.9	.19
BENZO(A)ANTHRACENE	ND	1.9	.19
BENZO(A)PYRENE	ND	.94	.19
BENZO(B)FLUORANTHENE	ND	.94	.19
BENZO(K)FLUORANTHENE	ND	1.9	.19
BENZO(G,H,I)PERYLENE	ND	.94	.19
CHRYSENE	ND	1.9	.19
DIBENZO(A,H)ANTHRACENE	ND	.94	.19
FLUORANTHENE	ND	1.9	.19
FLUORENE	ND	1.9	.19
INDENO(1,2,3-CD)PYRENE	ND	.94	.19
NAPHTHALENE	ND	.94	.19
PHENANTHRENE	ND	.94	.19
PYRENE	ND	1.9	.19

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	68	50-130

RL: Reporting Limit

Quantitation Report (QA Reviewed)

Data File : D:\CHEMDATA\06F30\RFZ514.D
Acq On : 30 JUN 2006 21:27
Sample : 06F281-07
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jul 5 15:03 2006

Vial: 19
Operator: SG
Inst : TO48
Multiplr: 1.00
Quant Results File: SV48F02.RI

Quant Method : C:\HPCHEM\1\METHODS\SV48F02.M (RTE Integrator)
Title : METHOD 8270C SIM GCMS-QP5000
Last Update : Fri Jun 02 15:54:34 2006
Response via : Initial Calibration
DataAcq Meth :

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.95	152	295438	10.00	ng	0.00
20) Phenanthrene-d10	7.03	188	538742	10.00	ng	0.00
28) Perylene-d12	10.84	264	301958	10.00	ng	0.00
System Monitoring Compounds						
3) Phenol-d5	2.66	99	33630	0.81	ng	0.00
27) Terphenyl-d14	8.58	244	116062	3.40	ng	0.00
Target Compounds						Qvalue
31) bis(2-Ethylhexyl)phthalate	9.65	149	78176	1.27	ng	95

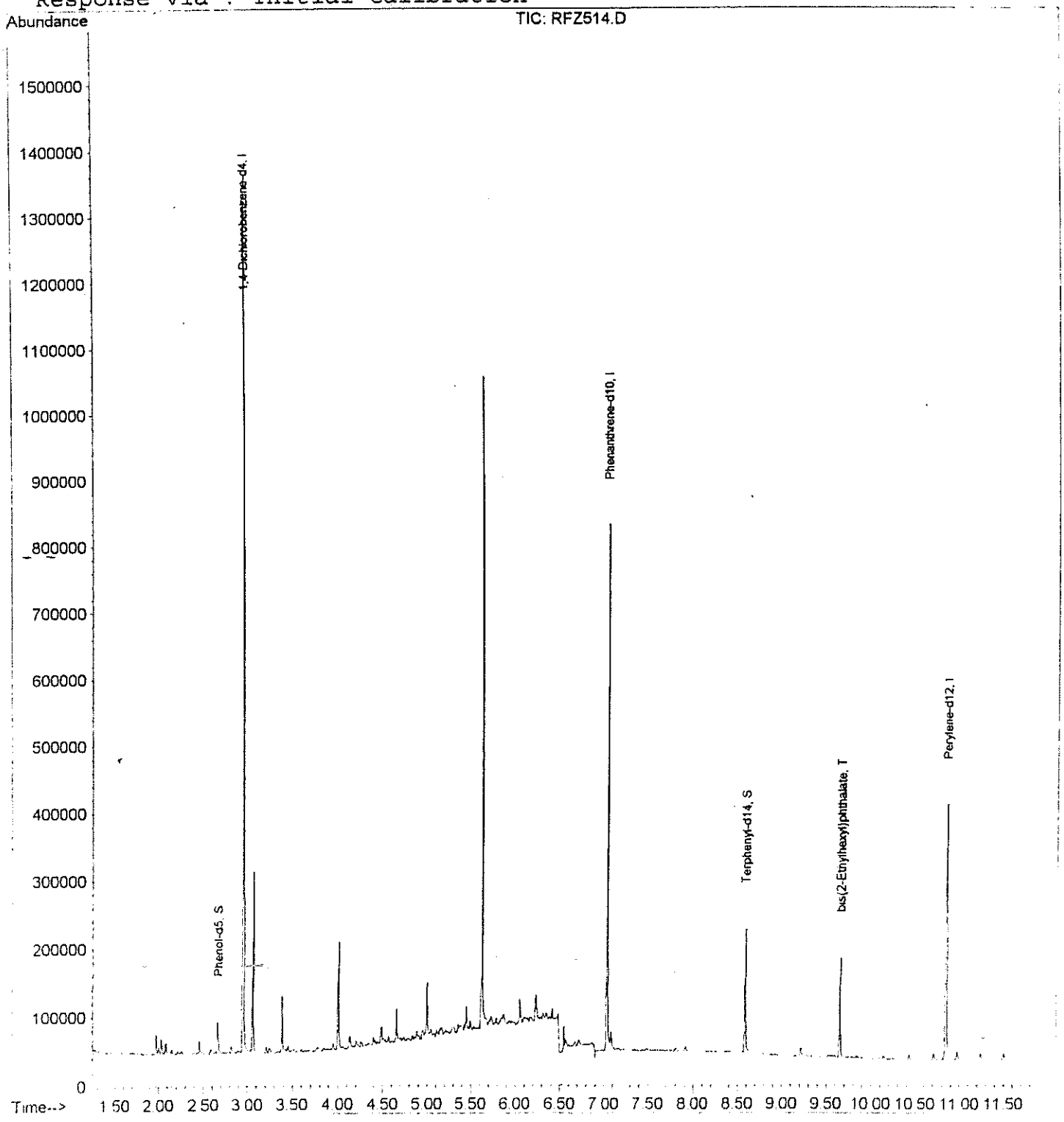
(#) = qualifier out of range (m) = manual integration

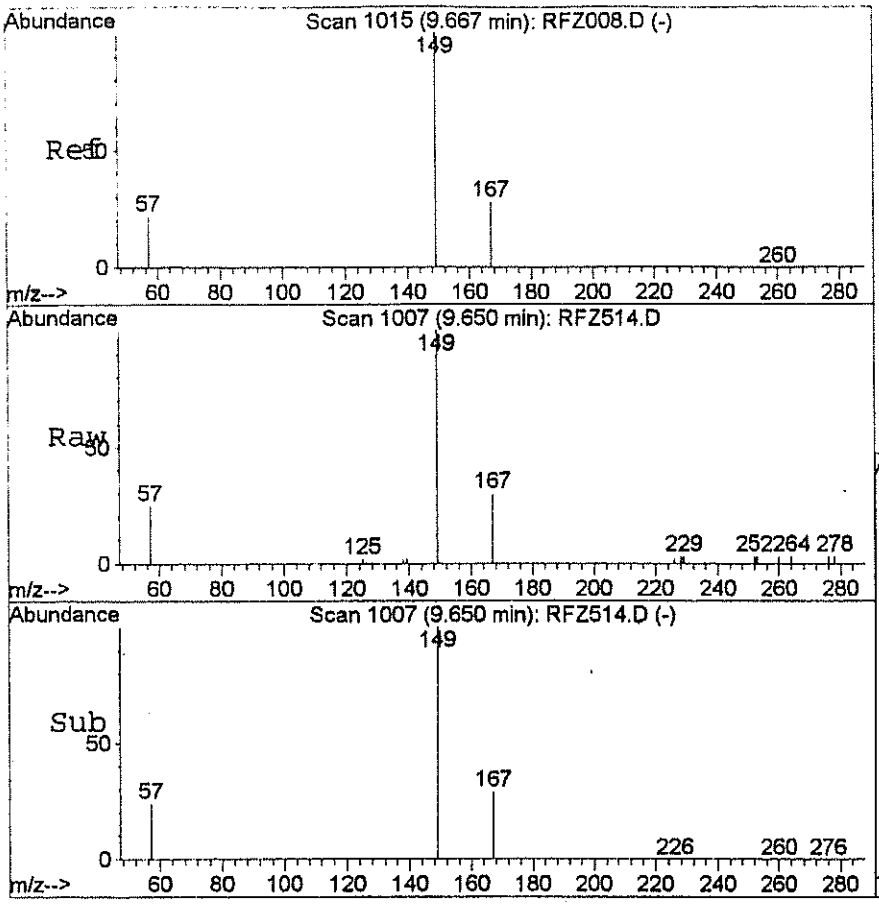
3010

Data File : D:\CHEMDATA\06F30\RFZ514.D
Acq On : 30 JUN 2006 21:27
Sample : 06F281-07
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jul 5 15:03 2006

Vial: 19
Operator: SG
Inst : TO48
Multiplr: 1.00
Quant Results File: SV48F02.RF

Method : C:\HPCHEM\1\METHODS\SV48F02.M (RTE Integrator)
Title : METHOD 8270C SIM GCMS-QP5000
Last Update : Fri Jun 02 15:54:34 2006
Response via : Initial Calibration

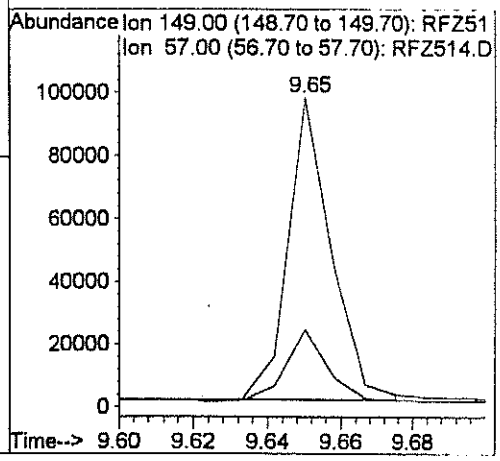




#31
bis(2-Ethylhexyl)phthalate
Concen: 1.27 ng
RT: 9.65 min Scan# 1007
Delta R.T. -0.02 min
Lab File: RFZ514.D
Acq: 30 JUN 2006 21:27

Tgt Ion:149 Resp: 78176

Ion	Ratio	Lower	Upper
149	100		
57	25.0	0.0	52.8



3012

SW 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 12:00
Sample ID: 10-14137-035	Date Analyzed: 07/07/06 20:43
Lab Samp ID: F281-08W	Dilution Factor: .96
Lab File ID: RGZ007	Matrix : WATER
Ext Btch ID: SVF039W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.96	.19
ACENAPHTHYLENE	ND	.96	.19
ANTHRACENE	ND	1.9	.19
BENZO(A)ANTHRACENE	ND	1.9	.19
BENZO(A)PYRENE	ND	.96	.19
BENZO(B)FLUORANTHENE	ND	.96	.19
BENZO(K)FLUORANTHENE	ND	1.9	.19
BENZO(G,H,I)PERYLENE	ND	.96	.19
CHRYSENE	ND	1.9	.19
DIBENZO(A,H)ANTHRACENE	ND	.96	.19
FLUORANTHENE	ND	1.9	.19
FLUORENE	ND	1.9	.19
INDENO(1,2,3-CD)PYRENE	ND	.96	.19
NAPHTHALENE	ND	.96	.19
PHENANTHRENE	ND	.96	.19
PYRENE	ND	1.9	.19

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	69	50-130

RL: Reporting Limit

SW 3520C/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 12:00
Sample ID: 10-14137-036	Date Analyzed: 06/30/06 22:05
Lab Samp ID: F281-09	Dilution Factor: .94
Lab File ID: RFZ516	Matrix : WATER
Ext Btch ID: SVF039W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	.94	.19
ACENAPHTHYLENE	ND	.94	.19
ANTHRACENE	ND	1.9	.19
BENZO(A)ANTHRACENE	ND	1.9	.19
BENZO(A)PYRENE	ND	.94	.19
BENZO(B)FLUORANTHENE	ND	.94	.19
BENZO(K)FLUORANTHENE	ND	1.9	.19
BENZO(G,H,I)PERYLENE	ND	.94	.19
CHRYSENE	ND	1.9	.19
DIBENZO(A,H)ANTHRACENE	ND	.94	.19
FLUORANTHENE	ND	1.9	.19
FLUORENE	ND	1.9	.19
INDENO(1,2,3-CD)PYRENE	ND	.94	.19
NAPHTHALENE	ND	.94	.19
PHENANTHRENE	ND	.94	.19
PYRENE	ND	1.9	.19

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	85	50-130

RL: Reporting Limit

QC SUMMARIES

SW 3520C/8270C SIM

SEMI VOLATILE ORGANICS BY GC/MS

Client : SES-TECH	Date Collected: NA
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/29/06
Batch No. : 06F281	Date Extracted: 06/29/06 12:00
Sample ID: MBLK1W	Date Analyzed: 06/30/06 18:34
Lab Samp ID: SVF039WB	Dilution Factor: 1
Lab File ID: RFZ505	Matrix : WATER
Ext Btch ID: SVF039W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ACENAPHTHENE	ND	1	.2
ACENAPHTHYLENE	ND	1	.2
ANTHRACENE	ND	2	.2
BENZO(A)ANTHRACENE	ND	2	.2
BENZO(A)PYRENE	ND	1	.2
BENZO(B)FLUORANTHENE	ND	1	.2
BENZO(K)FLUORANTHENE	ND	2	.2
BENZO(G,H,I)PERYLENE	ND	1	.2
CHRYSENE	ND	2	.2
DIBENZO(A,H)ANTHRACENE	ND	1	.2
FLUORANTHENE	ND	2	.2
FLUORENE	ND	2	.2
INDENO(1,2,3-CD)PYRENE	ND	1	.2
APHTHALENE	ND	1	.2
PHENANTHRENE	ND	1	.2
PYRENE	ND	2	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	77	50-130

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: SW 3520C/8270C SIM

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: SVF039WB SVF039WL
LAB FILE ID: RFZ505 RFZ506
DATE EXTRACTED: 06/29/0612:00 06/29/0612:00 DATE COLLECTED: NA
DATE ANALYZED: 06/30/0618:34 06/30/0618:54 DATE RECEIVED: 06/29/06
PREP. BATCH: SVF039W SVF039W
CALIB. REF: RFZ008 RFZ008

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	QC LIMIT (%)
Acenaphthene	ND	10	6.49	65	40-130
Acenaphthylene	ND	10	6.28	63	40-130
Anthracene	ND	10	6.31	63	50-130
Benzo(a)anthracene	ND	10	6.83	68	50-130
Benzo(a)pyrene	ND	10	6.43	64	50-130
Benzo(b)fluoranthene	ND	10	6.99	70	50-130
Benzo(k)fluoranthene	ND	10	6.24	62	30-150
Benzo(g,h,i)perylene	ND	10	6.53	65	50-130
Chrysene	ND	10	6.52	65	50-130
Dibenzo(a,h)anthracene	ND	10	6.47	65	40-140
Fluoranthene	ND	10	6.41	64	50-130
Fluorene	ND	10	6.74	67	40-130
Indeno(1,2,3-cd)pyrene	ND	10	6.47	65	30-140
Naphthalene	ND	10	5.82	58	30-130
Phenanthrene	ND	10	6.01	60	40-130
Pyrene	ND	10	6.19	62	40-130

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	QC LIMIT (%)
Terphenyl-d14	5	3.82	76	50-130

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: SW 3520C/8270C SIM

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: .94 .95 .94
SAMPLE ID: 10-14137-033
LAB SAMP ID: F281-06 F281-06M F281-06S
LAB FILE ID: RFZ511 RFZ512 RFZ513
DATE EXTRACTED: 06/29/0612:00 06/29/0612:00 06/29/0612:00 DATE COLLECTED: 06/27/06
DATE ANALYZED: 06/30/0620:29 06/30/0620:48 06/30/0621:08 DATE RECEIVED: 06/27/06
PREP. BATCH: SVF039W SVF039W SVF039W
CALIB. REF: RFZ008 RFZ008 RFZ008

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX (%
Acenaphthene	ND	9.5	5.38	57	9.4	5.1	54	5	40-130	
Acenaphthylene	ND	9.5	5.23	55	9.4	4.96	53	4	40-130	
Anthracene	ND	9.5	5.67	60	9.4	5.55	59	2	50-130	
Benzo(a)anthracene	ND	9.5	6.07	64	9.4	6.1	65	2	50-130	
Benzo(a)pyrene	ND	9.5	5.58	59	9.4	5.7	61	3	50-130	
Benzo(b)fluoranthene	ND	9.5	6.82	72	9.4	6.26	67	7	50-130	
Benzo(k)fluoranthene	ND	9.5	4.98	52	9.4	5.54	59	13	30-150	
Benzo(g,h,i)perylene	ND	9.5	5.74	60	9.4	5.8	62	3	50-130	
Chrysene	ND	9.5	5.63	59	9.4	5.74	61	3	50-130	
Dibenzo(a,h)anthracene	ND	9.5	5.71	60	9.4	5.87	62	3	40-140	
Fluoranthene	ND	9.5	5.8	61	9.4	5.81	62	2	50-130	
Fluorene	ND	9.5	6.04	64	9.4	5.5	58	10	40-130	
Indeno(1,2,3-cd)pyrene	ND	9.5	5.68	60	9.4	5.82	62	3	30-140	
Naphthalene	ND	9.5	4.66	49	9.4	4.65	49	0	30-130	
Phenanthrene	ND	9.5	5.44	57	9.4	5.41	58	2	40-130	
Pyrene	ND	9.5	5.73	60	9.4	5.8	62	3	40-130	

SURROGATE PARAMETER	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	QC LIMIT (%)
Terphenyl-d14	4.75	3.84	81	4.7	3.83	81	50-130

LABORATORY REPORT FOR

SES-TECH

CAMP PENDLETON, UST SITE 14137

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 06F281

CASE NARRATIVE

CLIENT: SES-TECH

PROJECT: CAMP PENDLETON, UST SITE 14137

SDG: 06F281

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Eight (8) soil samples were received on 06/27/06 for Total Petroleum Hydrocarbons by Extraction analysis by Method 3520C/8015B in accordance with SW846 3RD Edition.

1. Holding Time

Analytical holding time was met. Extraction was performed on 06/29/06 and completed on 06/30/06.

2. Calibration

Initial calibration was seven points for Diesel. %RSDs were within 20%. Continuing calibrations were carried out at 12-hour intervals and all recoveries were within 85-115%.

3. Method Blank

Method blank was free of contamination at half of the reporting limit.

4. Surrogate Recovery

All recoveries were within QC limits.

5. Lab Control Sample

Recovery was within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

Sample F281-06 was spiked. Recoveries were within QC limits.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met. Sample results were quantitated from C10 to C24 using Diesel (C10-C24) calibration factor.

Samples F281-06 to -08 displayed motor oil-like patterns.

LAB CHRONICLE
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : SES-TECH
Project : CAMP PENDLETON, UST SITE 14137

SDG NO. : 06F281
Instrument ID : GCT105

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSF044WB	1	NA	06/30/0613:30	06/29/0612:30	LF30012A	LF30010A	DSF044W	Method Blank
LCS1W	DSF044WL	1	NA	06/30/0613:47	06/29/0612:30	LF30013A	LF30010A	DSF044W	Lab Control Sample (LCS)
LCD1W	DSF044WC	1	NA	06/30/0614:03	06/29/0612:30	LF30014A	LF30010A	DSF044W	LCS Duplicate
10-14137-029	F281-02	.94	NA	06/30/0614:54	06/29/0612:30	LF30017A	LF30010A	DSF044W	Field Sample
10-14137-030	F281-03	.94	NA	06/30/0615:11	06/29/0612:30	LF30018A	LF30010A	DSF044W	Field Sample
10-14137-031	F281-04	.94	NA	06/30/0615:28	06/29/0612:30	LF30019A	LF30010A	DSF044W	Field Sample
10-14137-032	F281-05	.94	NA	06/30/0615:44	06/29/0612:30	LF30020A	LF30010A	DSF044W	Field Sample
10-14137-033	F281-06	.94	NA	06/30/0616:01	06/29/0612:30	LF30021A	LF30010A	DSF044W	Field Sample
10-14137-034	F281-07	.94	NA	06/30/0621:41	06/29/0612:30	LF30041A	LF30034A	DSF044W	Field Sample
10-14137-035	F281-08	.94	NA	06/30/0621:58	06/29/0612:30	LF30042A	LF30034A	DSF044W	Field Sample
10-14137-036	F281-09	.94	NA	06/30/0617:28	06/29/0612:30	LF30026A	LF30022A	DSF044W	Field Sample
10-14137-033MS	F281-06M	.94	NA	06/30/0616:54	06/29/0612:30	LF30024A	LF30022A	DSF044W	Matrix Spike Sample (MS)
10-14137-033MSD	F281-06S	.94	NA	06/30/0617:11	06/29/0612:30	LF30025A	LF30022A	DSF044W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 12:30
Sample ID	: 10-14137-029	Date Analyzed:	06/30/06 14:54
Lab Samp ID	: F281-02	Dilution Factor:	.94
Lab File ID	: LF30017A	Matrix	: WATER
Ext Btch ID	: DSF044W	% Moisture	: NA
Calib. Ref.	: LF30010A	Instrument ID	: GCT105

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	ND	.094	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	101	65-135

RL : Reporting Limit

Parameter	H-C Range
Diesel	C10-C24

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 12:30
Sample ID:	10-14137-030	Date Analyzed:	06/30/06 15:11
Lab Samp ID:	F281-03	Dilution Factor:	.94
Lab File ID:	LF30018A	Matrix :	WATER
Ext Btch ID:	DSF044W	% Moisture :	NA
Calib. Ref.:	LF30010A	Instrument ID :	GCT105

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	ND	.094	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	105	65-135

RL : Reporting Limit

Parameter	H-C Range
Diesel	C10-C24

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 12:30
Sample ID	: 10-14137-031	Date Analyzed:	06/30/06 15:28
Lab Samp ID	: F281-04	Dilution Factor:	.94
Lab File ID	: LF30019A	Matrix	: WATER
Ext Btch ID	: DSF044W	% Moisture	: NA
Calib. Ref.	: LF30010A	Instrument ID	: GCT105

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	ND	.094	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	102	65-135

RL : Reporting Limit

Parameter	H-C Range
Diesel	C10-C24

5946

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

EMAX LABORATORIES, INC.

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 12:30
Sample ID:	10-14137-032	Date Analyzed:	06/30/06 15:44
Lab Samp ID:	F281-05	Dilution Factor:	.94
Lab File ID:	LF30020A	Matrix	: WATER
Ext Btch ID:	DSF044W	% Moisture	: NA
Calib. Ref.:	LF30010A	Instrument ID	: GCT105

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	ND	.094	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	103	65-135

RL : Reporting Limit

Parameter	H-C Range
Diesel	C10-C24

5287

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 12:30
Sample ID	: 10-14137-033	Date Analyzed:	06/30/06 16:01
Lab Samp ID	: F281-06	Dilution Factor:	.94
Lab File ID	: LF30021A	Matrix	: WATER
Ext Btch ID	: DSF044W	% Moisture	: NA
Calib. Ref.	: LF30010A	Instrument ID	: GCT105

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	.15	.094	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	104	65-135

RL : Reporting Limit

Parameter	H-C Range
Diesel	C10-C24

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

EMAX LABORATORIES, INC.

Client : SES-TECH	Date Collected: 06/27/06
Project : CAMP PENDLETON, UST SITE 14137	Date Received: 06/27/06
Batch No. : 06F281	Date Extracted: 06/29/06 12:30
Sample ID: 10-14137-034	Date Analyzed: 06/30/06 21:41
Lab Samp ID: F281-07	Dilution Factor: .94
Lab File ID: LF30041A	Matrix : WATER
Ext Btch ID: DSF044W	% Moisture : NA
Calib. Ref.: LF30034A	Instrument ID : GCT105

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	2.4	.094	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	110	65-135

RL : Reporting Limit

Parameter	H-C Range
Diesel	C10-C24

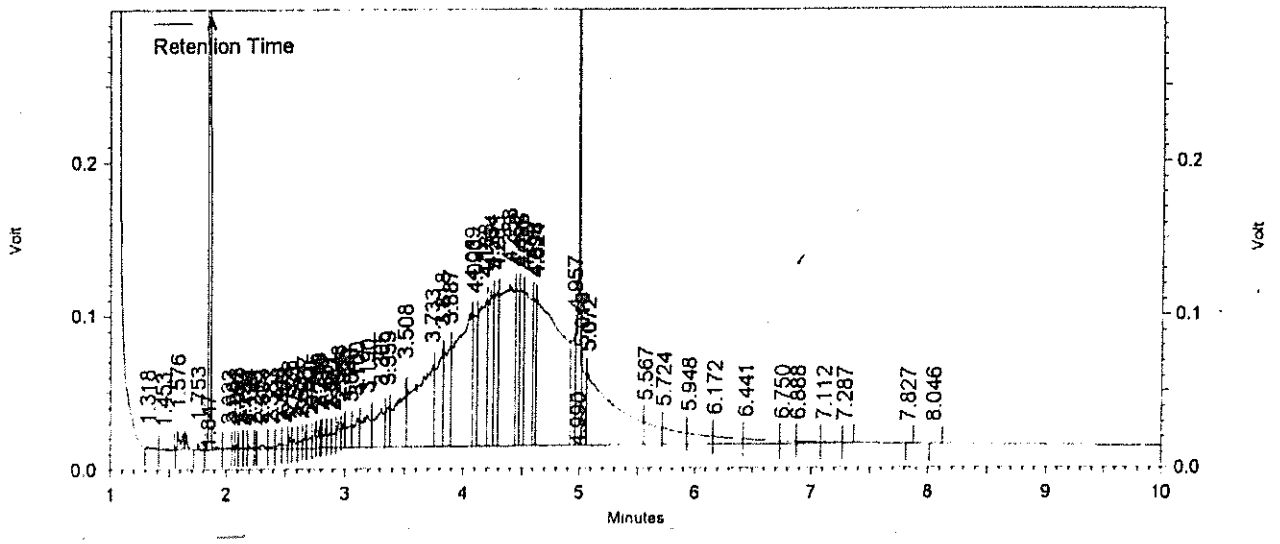
5003

METHOD 8015 by GC/FID
EMAX Laboratories, Inc.

Inst. Name: : GC105 (Offline)
File : D:\EZCHROM\CHROM\105F30\LF30.041
Method : D:\EZCHROM\METHODS\DS105F28.met
Sequence: : D:\EZCHROM\SEQUENCE\105F30.seq
Sample ID : 06F281-07
Acquired : 06/30/06 21:41:37
Printed : 07/03/06 16:00:12
User : System

A Results

Name	Retention Time	Area	Average RF	ESTD concentration
BROMOBENZENE	1.847	1442668	15831.70808	91.125
HEXACOSANE	4.990	799710	29142.35319	27.442
Totals		2242378		118.567
DIESEL(TOTAL)		8839319	29757.13629	301.767
DIESEL(C10-C24)		7385638	29230.81486	252.370
DIESEL(C10-C28)		8351652	29265.15514	285.379
Totals		24576609		839.515



Software Version: Version 3.1.7

5018

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 12:30
Sample ID	: 10-14137-035	Date Analyzed:	06/30/06 21:58
Lab Samp ID	: F281-08	Dilution Factor:	.94
Lab File ID	: LF30042A	Matrix	: WATER
Ext Btch ID	: DSF044W	% Moisture	: NA
Calib. Ref.	: LF30034A	Instrument ID	: GCT105

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	2.4	.094	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	122	65-135

RL : Reporting Limit

Parameter	H-C Range
Diesel	C10-C24

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

EMAX LABORATORIES, INC.

Client	: SES-TECH	Date Collected:	06/27/06
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/27/06
Batch No.	: 06F281	Date Extracted:	06/29/06 12:30
Sample ID	: 10-14137-036	Date Analyzed:	06/30/06 17:28
Lab Samp ID	: F281-09	Dilution Factor:	.94
Lab File ID	: LF30026A	Matrix	: WATER
Ext Btch ID	: DSF044W	% Moisture	: NA
Calib. Ref.	: LF30022A	Instrument ID	: GCT105

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	ND	.094	.024

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	101	65-135

RL : Reporting Limit

Parameter	H-C Range
Diesel	C10-C24

QC SUMMARIES

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: SES-TECH	Date Collected:	NA
Project	: CAMP PENDLETON, UST SITE 14137	Date Received:	06/29/06
Batch No.	: 06F281	Date Extracted:	06/29/06 12:30
Sample ID	: MBLK1W	Date Analyzed:	06/30/06 13:30
Lab Samp ID	: DSF044WB	Dilution Factor:	1
Lab File ID	: LF30012A	Matrix	: WATER
Ext Btch ID	: DSF044W	% Moisture	: NA
Calib. Ref.:	LF30010A	Instrument ID	: GCT105

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
DIESEL	ND	.1	.025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
HEXACOSANE	107	65-135

RL : Reporting Limit

Parameter	H-C Range
Diesel	C10-C24

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: METHOD 3520C/8015B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	DSF044WB	DSF044WL	DSF044WC		
LAB FILE ID:	LF30012A	LF30013A	LF30014A		
DATE EXTRACTED:	06/29/0612:30	06/29/0612:30	06/29/0612:30	DATE COLLECTED:	NA
DATE ANALYZED:	06/30/0613:30	06/30/0613:47	06/30/0614:03	DATE RECEIVED:	06/29/06
PREP. BATCH:	DSF044W	DSF044W	DSF044W		
CALIB. REF:	LF30010A	LF30010A	LF30010A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Diesel	ND	5	4.87	97	5	4.65	93	5	65-135	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Hexacosane	.25	.291	116	.25	.28	112	65-135

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

EMAX LABORATORIES, INC.

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: METHOD 3520C/8015B

MATRIX: WATER % MOISTURE: NA

DILUTION FACTOR:	.94	.94	.94		
SAMPLE ID:	10-14137-033				
LAB SAMP ID:	F281-06	F281-06M	F281-06S		
LAB FILE ID:	LF30021A	LF30024A	LF30025A		
DATE EXTRACTED:	06/29/0612:30	06/29/0612:30	06/29/0612:30	DATE COLLECTED:	06/27/06
DATE ANALYZED:	06/30/0616:01	06/30/0616:54	06/30/0617:11	DATE RECEIVED:	06/27/06
PREP. BATCH:	DSF044W	DSF044W	DSF044W		
CALIB. REF:	LF30010A	LF30022A	LF30022A		

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	SPIKE AMT (mg/L)	MSD RSLT (mg/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RP (%)
Diesel	.146	4.7	3.28	67	4.7	3.37	69	3	65-135	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	SPIKE AMT (mg/L)	MSD RSLT (mg/L)	MSD % REC	QC LIMIT (%)
Hexacosane	.235	.248	105	.235	.234	100	65-135

LABORATORY REPORT FOR

SES-TECH

CAMP PENDLETON, UST SITE 14137

METHOD 300.0
ANIONS

SDG#: 06F281

CASE NARRATIVE

CLIENT: SES-TECH

PROJECT: CAMP PENDLETON, UST SITE 14137

SDG: 06F281

METHOD 300.0
ANIONS

Seven (7) water samples were received on 06/27/06 for Nitrate-N and Sulfate analyses by method 300.0 in accordance with "Method for Determination of Inorganic Anions by Ion Chromatography", EPA 600/84-017.

1. **Holding Time**

   Analyses met holding time criteria.

2. **Method Blank**

   Method blanks were free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limits.

4. **Duplicate**

   Sample F281-06 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample F281-06 was spiked. Recovery was within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

   Nitrate-N was reported as Nitrogen concentration.

SAMPLE RESULTS

METHOD 300.0
NITRATE-N

Client : SES-TECH
Project : CAMP PENDLETON, UST SITE 14137
Batch No. : 06F281

Matrix : WATER
Instrument ID : I100

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICF051WB	ND	1	NA	.1	.05	06/27/0616:56	NA	AF27-03	AF27-01	ICF051W	NA	NA
LCS1W	ICF051WL	1.9	1	NA	.1	.05	06/27/0617:13	NA	AF27-04	AF27-01	ICF051W	NA	NA
LCD1W	ICF051WC	1.89	1	NA	.1	.05	06/27/0617:31	NA	AF27-05	AF27-01	ICF051W	NA	NA
10-14137-029	F281-02	ND	1	NA	.1	.05	06/27/0621:38	NA	AF27-16	AF27-13	ICF051W	06/27/06	06/27/06
10-14137-030	F281-03	ND	1	NA	.1	.05	06/27/0621:56	NA	AF27-17	AF27-13	ICF051W	06/27/06	06/27/06
10-14137-031	F281-04	ND	1	NA	.1	.05	06/27/0622:13	NA	AF27-18	AF27-13	ICF051W	06/27/06	06/27/06
10-14137-032	F281-05	ND	1	NA	.1	.05	06/27/0622:31	NA	AF27-19	AF27-13	ICF051W	06/27/06	06/27/06
10-14137-033	F281-06	ND	1	NA	.1	.05	06/27/0622:48	NA	AF27-20	AF27-13	ICF051W	06/27/06	06/27/06
10-14137-033DUP	F281-06D	ND	1	NA	.1	.05	06/27/0623:06	NA	AF27-21	AF27-13	ICF051W	06/27/06	06/27/06
10-14137-033MS	F281-06M	2.02	1	NA	.1	.05	06/27/0623:24	NA	AF27-22	AF27-13	ICF051W	06/27/06	06/27/06
10-14137-034	F281-07	ND	1	NA	.1	.05	06/27/0623:41	NA	AF27-23	AF27-13	ICF051W	06/27/06	06/27/06
10-14137-035	F281-08	ND	1	NA	.1	.05	06/27/0623:59	NA	AF27-24	AF27-13	ICF051W	06/27/06	06/27/06

METHOD 300.0
SULFATE

Client : SES-TECH
Project : CAMP PENDLETON, UST SITE 14137
Batch No. : 06F281

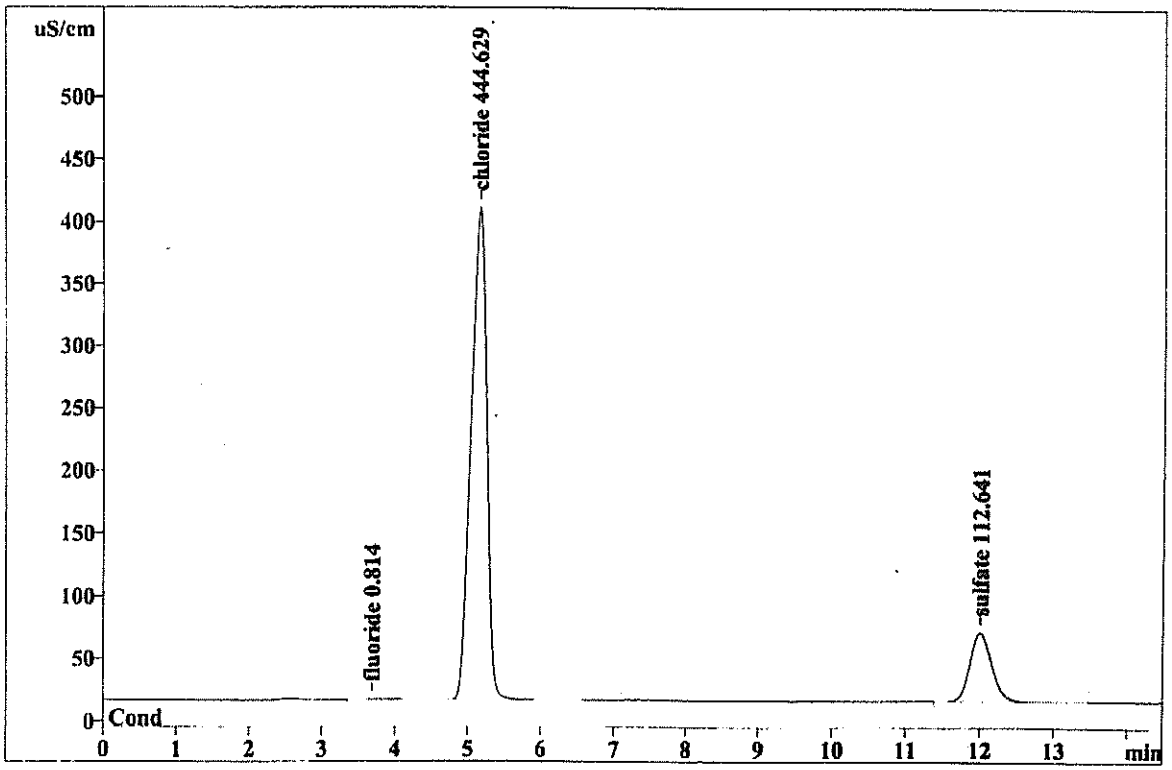
Matrix : WATER
Instrument ID : I100

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICF054WB	ND	1	NA	.5	.25	06/29/0612:56	NA	AF29-03	AF29-01	ICF054W	NA	NA
LCS1W	ICF054WL	4.9	1	NA	.5	.25	06/29/0613:14	NA	AF29-04	AF29-01	ICF054W	NA	NA
LCD1W	ICF054WC	4.88	1	NA	.5	.25	06/29/0613:31	NA	AF29-05	AF29-01	ICF054W	NA	NA
10-14137-029	F281-02	173	20	NA	10	5	06/29/0617:51	NA	AF29-18	AF29-13	ICF054W	06/27/06	06/27/06
10-14137-030	F281-03	78.8	10	NA	5	2.5	06/29/0618:09	NA	AF29-19	AF29-13	ICF054W	06/27/06	06/27/06
10-14137-031	F281-04	156	10	NA	5	2.5	06/29/0618:26	NA	AF29-20	AF29-13	ICF054W	06/27/06	06/27/06
10-14137-032	F281-05	161	20	NA	10	5	06/29/0618:44	NA	AF29-21	AF29-13	ICF054W	06/27/06	06/27/06
10-14137-033	F281-06	133	20	NA	10	5	06/29/0619:11	NA	AF29-22	AF29-13	ICF054W	06/27/06	06/27/06
10-14137-033DUP	F281-06D	133	20	NA	10	5	06/29/0619:28	NA	AF29-23	AF29-13	ICF054W	06/27/06	06/27/06
10-14137-033MS	F281-06M	232	20	NA	10	5	06/29/0619:51	NA	AF29-24	AF29-13	ICF054W	06/27/06	06/27/06
10-14137-034	F281-07	90.7	10	NA	5	2.5	06/29/0620:43	NA	AF29-27	AF29-25	ICF054W	06/27/06	06/27/06
10-14137-035	F281-08	90.8	10	NA	5	2.5	06/29/0621:01	NA	AF29-28	AF29-25	ICF054W	06/27/06	06/27/06

Report date: 6/28/2006 7:28:19 PM
Printed by: Cherry Dam

Ident: AF27-23 F281-07
Analysis from: 6/27/2006 11:41:41 PM
File: q6272341.chw Last save: 6/27/2006 11:56:08 PM
Modified!
Method: IC100-E08.mtw Last save: 6/27/2006 5:41:07 PM
Run operator: Cherry Dam
Analysis number: 18758

SAMPLE:
:
Vial number: 23
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height uS/cm	Area uS/cm*sec	Conc. mg/L	Name
1	3.68	0.37	14.163	0.814	fluoride
2	5.16	393.82	5860.017	444.629	chloride
3	12.00	54.55	1094.366	112.641	sulfate
3	14.50	448.74	6968.546	558.084	

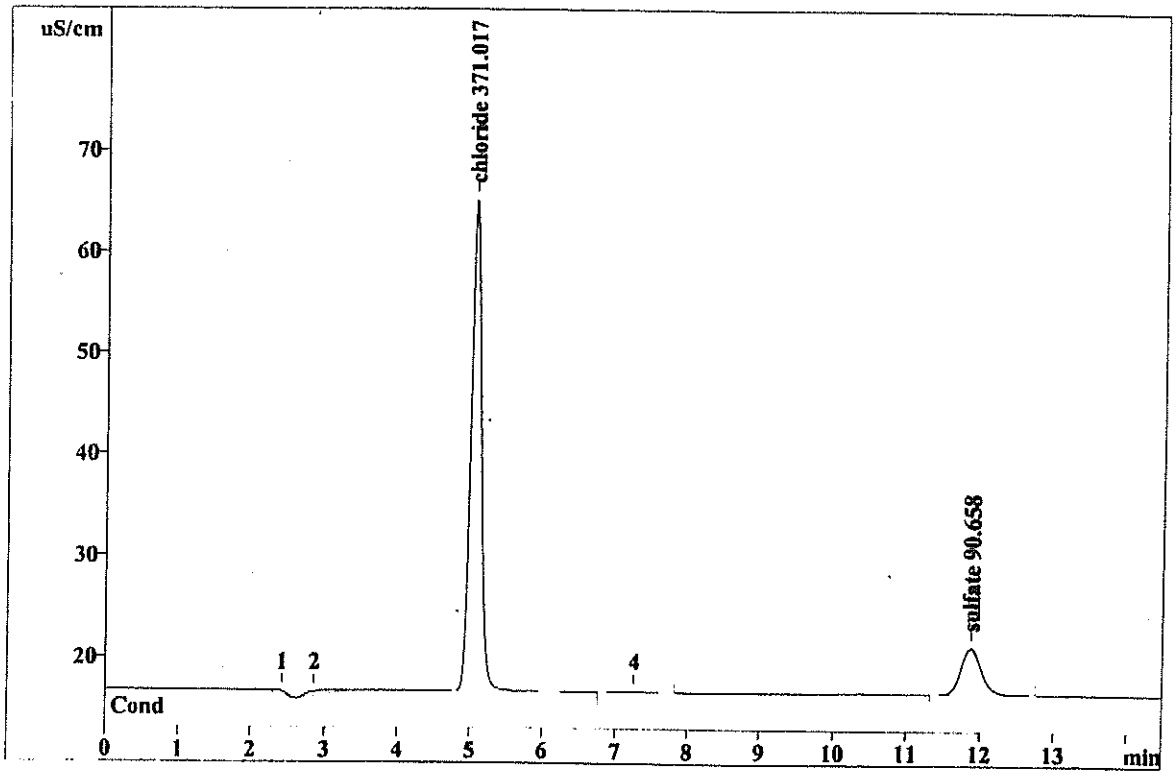
This report has been created by IC Net
METROHM LTD

Printed by: Cherry Dam

Ident: AF29-27 F281-07 DF=10
Analysis from: 6/29/2006 8:43:52 PM
File: Q6292043.CHW Last save: 6/29/2006 8:58:18 PM

Method: IC100-E08.mtw Last save: 6/29/2006 11:05:42 A
Run operator: Cherry Dam
Analysis number: 18853

SAMPLE:
:
Vial number: 27
Volume: 1.0 µL
Dilution: 10.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height uS/cm	Area uS/cm*sec	Conc. mg/L	Name
1	2.42	0.36	4.569	0.000	
2	2.86	0.45	11.085	0.000	
3	5.04	48.37	487.779	371.017	chloride
4	7.25	0.07	1.907	0.000	
5	11.87	4.58	86.944	90.658	sulfate
5	14.50	53.83	592.284	461.675	

This report has been created by IC Net
METROHM LTD

QC SUMMARIES

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: METHOD 300.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	ICF051WB	ICF051WL	ICF051WC		
LAB FILE ID:	AF27-03	AF27-04	AF27-05		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	06/27/0616:56	06/27/0617:13	06/27/0617:31	DATE RECEIVED:	NA
PREP. BATCH:	ICF051W	ICF051W	ICF051W		
CALIB. REF:	AF27-01	AF27-01	AF27-01		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Nitrate-N	ND	2	1.9	95	2	1.89	94	0	90-110	20

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: METHOD 300.0

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: 10-14137-033
LAB SAMP ID: F281-06 F281-06M
LAB FILE ID: AF27-20 AF27-22
DATE EXTRACTED: NA NA DATE COLLECTED: 06/27/06
DATE ANALYZED: 06/27/0622:48 06/27/0623:24 DATE RECEIVED: 06/27/06
PREP. BATCH: ICF051W ICF051W
CALIB. REF: AF27-13 AF27-13

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
Nitrate-N	ND	2	2.02	101	80-120

A 5685

EMAX QUALITY CONTROL DATA
DUPLICATE SAMPLE ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: METHOD 300.0

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	1		
SAMPLE ID:	10-14137-033			
EMAX SAMP ID:	F281-06	F281-06D		
LAB FILE ID:	AF27-20	AF27-21		
DATE EXTRACTED:	NA	NA	DATE COLLECTED:	06/27/06
DATE ANALYZED:	06/27/0622:48	06/27/0623:06	DATE RECEIVED:	06/27/06
PREP. BATCH:	ICF051W	ICF051W		
CALIB. REF:	AF27-13	AF27-13		

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	DUPL RSLT (mg/L)	RPD RSLT %	QC LIMIT (%)
Nitrate-N	ND	ND	0	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: METHOD 300.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	ICF054WB	ICF054WL	ICF054WC		
LAB FILE ID:	AF29-03	AF29-04	AF29-05		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	06/29/0612:56	06/29/0613:14	06/29/0613:31	DATE RECEIVED:	NA
PREP. BATCH:	ICF054W	ICF054W	ICF054W		
CALIB. REF:	AF29-01	AF29-01	AF29-01		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Sulfate	ND	5	4.9	98	5	4.88	98	0	90-110	20

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: METHOD 300.0

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	20	20		
SAMPLE ID:	10-14137-033			
LAB SAMP ID:	F281-06	F281-06M		
LAB FILE ID:	AF29-22	AF29-24		
DATE EXTRACTED:	NA	NA	DATE COLLECTED:	06/27/06
DATE ANALYZED:	06/29/0619:11	06/29/0619:51	DATE RECEIVED:	06/27/06
PREP. BATCH:	ICF054W	ICF054W		
CALIB. REF:	AF29-13	AF29-13		

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
Sulfate	133	100	232	99	80-120

EMAX QUALITY CONTROL DATA
DUPLICATE SAMPLE ANALYSIS

CLIENT: SES-TECH
PROJECT: CAMP PENDLETON, UST SITE 14137
BATCH NO.: 06F281
METHOD: METHOD 300.0

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	20	20		
SAMPLE ID:	10-14137-033			
EMAX SAMP ID:	F281-06	F281-06D		
LAB FILE ID:	AF29-22	AF29-23		
DATE EXTRACTED:	NA	NA	DATE COLLECTED:	06/27/06
DATE ANALYZED:	06/29/0619:11	06/29/0619:28	DATE RECEIVED:	06/27/06
PREP. BATCH:	ICF054W	ICF054W		
CALIB. REF:	AF29-13	AF29-13		

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	DUPL RSLT (mg/L)	RPD RSLT %	QC LIMIT (%)
Sulfate	133	133	0	20